

Radio Test Report: EDCS - 548082 For CP-7921G 5GHz Radio Against the following Specifications : FCC CFR 47 part 15.247 FCC CFR 47 part 15.407 RSS-210 RSS-102

> Cisco Systems EMC Laboratory

170 West Tasman Drive San Jose, CA 95134



Certificate Number : 1178-01

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This report replaces any previously entered test report under EDCS - 548082

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Section 1: Overview

Test Summary

The samples were assessed against the tests detailed in section 3 under the requirements of the following standards:

Emissions:

CFR47 Part 15.247 CFR47 Part 15.407 RSS-210 RSS-102

Notes:

 Measurements were made in accordance with FCC docket #: DA-02-2138A1, KDB Publication No. 558074 & measurement method of spurious emission tolerance to the International Telecommunication Union (ITU) Recommendation SM329.

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Section 2: Assessment Information

2.1 General

This report must not be used to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the federal Government.

This report may contain data that is not enveloped by the scope of the A2LA accreditation (A2LA certificate number 1178-01). Please refer to Appendix C for further details.

With regard to this assessment, the following points should be noted:

- a) The results contained in this report relate only to the items tested and were obtained in the period between the date of the initial assessment and the date of issue of the report. Manufactured products will not necessarily give identical results, due to production tolerances and measurement uncertainties.
- b) The apparatus was set up and exercised using the configuration and modes of operation defined in this report only.
- c) Where relevant, the apparatus was only assessed using the susceptibility criteria defined in this report and the Test Assessment Plan (TAP).
- d) All testing was performed under the following environmental conditions:

 Temperature
 15°C to 35°C (54°F to 95°F)

 Atmospheric Pressure
 860mbar to 1060mbar (25.4" to 31.3")

 Humidity
 10% to 75*%

- All AC testing was performed at one or more of the following supply voltages: 110V (+/-10%) 60Hz
 220V (+/-10%) 50 or 60Hz
- f) Cisco Systems, Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). The scope of accreditation, certificate number 1178-01 is referenced in appendix C, along with further details.

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2.2 Start Date of Testing

30-Aug-2006

2.3 Report Issue Date

Cisco Systems, Inc. uses an electronic system to issue, store and control the revision of test reports. This system is called the Engineering Document Control System (EDCS). The actual report issue date is embedded into the original file on EDCS. Any copies of this report, either electronic or paper, that are not on EDCS must be considered uncontrolled

2.4 Testing facilities

This assessment was performed by:

Testing Laboratory

Cisco Systems, Inc., 170 West Tasman Drive San Jose, CA 95134, USA

Registration Numbers for Industry Canada

| Cisco System Site | Site Identifier |
|-------------------------|-------------------|
| Building P, 10m Chamber | Company #: 4624-2 |
| Building P, 5m Chamber | Company #: 4624-1 |
| Building N, 5m Chamber | Company #: 6111 |
| Building I, 5m Chamber | Company #: 6112 |

Test Engineers

Jose Aguirre, Phillip Carranco

2.5 Equipment Assessed (EUT)

CP-7921G 5GHz radio

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2.6 EUT Description

The CP-7921G will develop the next generation 802.11 wireless IP phone that will provide greater network capacity by incorporating 802.11a/b/g, smaller form factor, color active matrix display, increased battery life, and enhanced durability as compared.

2.7 Scope of Assessment

Tests have been performed in accordance with the relevant Test and Assessment Plan (TAP), a copy of which is contained in Appendix F of this report, and the relevant Cisco Systems, Inc. radio test procedures (EDCS-420238). This test report may not cover all of the tests highlighted in the test plan.

2.8 Units of Measurement

The units of measurements defined in the appendices are reported in specific terms, which are test dependent. Where radiated measurements are concerned these are defined at a particular distance. Basic voltage measurements are defined in units of [dBuV]

As an example, the basic calculation for all measurements is as follows:

Emission level [dBuV] = Indicated voltage level [dBuV] + Cable Loss [dB] + Other correction factors [dB]

The combinations of correction factors are dependent upon the exact test configurations [see test equipment lists for further details] and may include:-

Antenna Factors, Pre Amplifier Gain, LISN Loss, Pulse Limiter Loss and Filter Insertion Loss.

Note: to convert the results from dBuV/m to uV/m use the following formula:-

Level in uV/m = Common Antilogarithm [(X dBuV/m)/20] = Y uV/m

2.9 Report Template Control No.

Revision: SJRIA 2.0

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Section 3: Result Summary

Conducted emissions

| Basic Standard | Result |
|------------------------------|--------|
| 6dB Bandwidth | Pass |
| 99% and 26dB Bandwidth | Pass |
| Peak Output Power | Pass |
| Power Spectral Density | Pass |
| Peak Excursion | Pass |
| Conducted Spurious Emissions | Pass |

Radiated emissions

| Basic Standard | Result |
|---|--------|
| Radiated Spurious and Harmonic Emissions | Pass |
| Restricted Band Edge Measurements | Pass |

Section 4: Sample Details

Note: Each sample was evaluated to ensure that its condition was suitable to be used as a test sample prior to the commencement of testing. Please also refer to the "Justification for worst Case test Configuration" section of this report for further details on the selection of EUT samples.

4.1 Sample Details

| Sample Number | Equipment Details | Serial Number | Part Number |
|------------------|-------------------|---------------|----------------|
| S01 | cp7921g | IAC102900AD | cp7921g |
| S02 | Laptop computer | 60739762u | Tecra 8100 |

The following antennas were evaluated as part of this testing process. The antennas listed reflect the maximum gain allowed for each family type of antenna:

Fixed Internal Antenna, Gain= 3.5dBi (no external antenna can be used)

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4.2 System Details

| System # | Description | Samples |
|----------|-------------|---------|
| 1 | Radio | S01 |
| 2 | Support | S02 |

4.3 Mode of Operation Details

| Mode# | Description | Comments |
|-------|-------------|-----------------------------------|
| 1 | Traffic | FCC continuous-ones (802.11a/b/g) |

Section 5: Modifications

5.1 Sample Modifications Performed During Assessment

No modifications were performed during assessment.

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Appendix A: Formal Test Results

6dB & 99% Bandwidth

15.247 & RSS-210(A8.2)

Systems using digital modulation techniques may operate in the 5725-5850MHz band. The minimum 6 dB bandwidth shall be at least 500 kHz.

| Frequency | Data Rate | 6dB Bandwidth | Limit (kHz) | Margin |
|-----------|-----------|---------------|-------------|--------|
| (MHz) | (Mbps) | (kHz) | | (kHz) |
| 5745 | 6 | 16507 | 500 | -16007 |
| 5785 | 6 | 16511 | 500 | -16011 |
| 5805 | 6 | 16498 | 500 | -15998 |

| Frequency | Data Rate | 99% Bandwidth |
|-----------|-----------|---------------|
| (MHz) | (Mbps) | (kHz) |
| 5745 | 6 | 16476 |
| 5785 | 6 | 16478 |
| 5805 | 6 | 16481 |



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99% and 26dB Bandwidth

| Frequency (MHz) | Data Rate (Mbps) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
|--------------------|---------------------|------------------------|----------------------------|
| 5180 | 6 | 16.94 | 24.019 |
| 5200 | 6 | 18.19 | 33.014 |
| 5260 | 6 | 18.14 | 33.466 |
| 5320 | 6 | 16.90 | 24.052 |
| 5500 | 6 | 17.13 | 26.446 |
| 5600 | 6 | 17.26 | 26.987 |

Graphical Test Results



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Peak Output Power

15.407 & RSS-210(A9.2):

For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The smallest 26dB bandwidth for all channels is 22.319MHz. The maximum conducted output power is calculated as 4dBm+10*log(22.319MHz) = 17.48dBm. 50mW is the lesser of the two

the frequency bands of operation shall For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The smallest 26dB bandwidth for all channels is 21.803 MHz. The maximum conducted output power is calculated as $11dBm+10^{10}(21.803MHz) = 24.38dBm$. 250mW is the lesser of the two.

15.247 & RSS-210(A8.4):

The maximum conducted output power of the intentional radiator for systems using digital modulation in the 5725-5850MHz band shall not exceed 1 Watt (30dBm). If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

| Frequency (MHz) | Data Rate (Mbps) | Peak Output Power (dBm) | Limit (dBm) | Margin (dB) |
|--------------------|---------------------|----------------------------|-------------|-------------|
| 5180 | 6 | 11.63 | 17 | -5.37 |
| 5200 | 6 | 14.96 | 17 | -2.04 |
| 5260 | 6 | 15.04 | 24 | -8.96 |
| 5320 | 6 | 12.10 | 24 | -11.90 |
| 5500 | 6 | 14.66 | 24 | -9.34 |
| 5600 | 6 | 14.75 | 24 | -9.25 |
| 5700 | 6 | 14.59 | 24 | -9.41 |

(Measurement made using FCC Public Notice DA 02-2138, August 30, 2002)

| Frequency (MHz) | Data Rate (Mbps) | Peak Output Power (dBm) | Limit (dBm) | Margin (dB) |
|--------------------|---------------------|----------------------------|-------------|-------------|
| 5745 | 6 | 21.81 | 30 | 8.19 |
| 5785 | 6 | 22.19 | 30 | 7.81 |
| 5805 | 6 | 21.95 | 30 | 8.05 |

(Measurement made using KDB Publication No. 558074 power option 1, peak power meter)

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Power Spectral Density

15.407 & RSS-210(A9.2):

For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

15.247 & RSS-210(A8.2):

For digitally modulated systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

| Frequency (MHz) | Data Rate (Mbps) | Peak Power Spectral Density (dBm/MHz) | Limit (dBm) | Margin (dB) |
|--------------------|---------------------|---|----------------|----------------|
| 5180 | 6 | 1.301 | 4 | -2.699 |
| 5200 | 6 | 3.973 | 4 | -0.027 |
| 5260 | 6 | 4.353 | 11 | -6.647 |
| 5320 | 6 | 1.358 | 11 | -9.642 |
| 5500 | 6 | 3.906 | 11 | -7.094 |
| 5600 | 6 | 4.417 | 11 | -6.583 |
| 5700 | 6 | 3.701 | 11 | -7.299 |
| Frequency (MHz) | Data Rate (Mbps) | Peak Power Spectral Density (dBm/3kHz) | Limit (dBm) | Margin (dB) |
| 5745 | 6 | -11.8 | 8 | -19.8 |
| 5785 | 6 | -10.5 | 8 | -18.5 |
| 5805 | 6 | -10.94 | 8 | -18.94 |

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Peak Excursion

15.407: The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

| Frequency | Data Bata | Peak | Limit | Margin |
|-----------|--------------|-------|---------|--------|
| | (Mbps) | (dB) | (ubiii) | (ub) |
| 5180 | 6 | 8.496 | 13 | -4.504 |
| 5200 | 6 | 8.019 | 13 | -4.981 |
| 5260 | 6 | 9.058 | 13 | -3.942 |
| 5320 | 6 | 8.422 | 13 | -4.578 |
| 5500 | 6 | 9.645 | 13 | -3.355 |
| 5600 | 6 | 8.514 | 13 | -4.486 |

Graphical Test Results



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Conducted Spurious Emissions

15.247 & RSS-210(A8.5):

In any 100 kHz bandwidth outside the frequency band in which the digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

Graphical Test Results



Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 4515.541 | -75.6 | 0.4 | 19.8 | -55.5 | Peak(Scan) | RF | -32.6 | -22.9 | Pass | |
| 5066.435 | -82.5 | 0.4 | 19.8 | -62.3 | Peak(Scan) | RF | -32.6 | -29.7 | Pass | |
| 6895.595 | -78.4 | 0.4 | 19.8 | -58.2 | Peak(Scan | RF | -32.6 | -25.6 | Pass | Noise Floor |
| 34453.061 | -70.2 | 0.9 | 20.7 | -48.5 | Peak(Scan | RF | -32.6 | -15.9 | Pass | Noise floor |
| 35614.514 | -70.6 | 1 | 20.7 | -48.9 | Peak(Scan | RF | -32.6 | -16.3 | Pass | Noise floor |
| 38578.221 | -66.8 | 1 | 20.4 | -45.4 | Peak(Scan | RF | -32.6 | -12.8 | Pass | Noise floor |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 38466.434 | -67.3 | 1 | 20.4 | -45.8 | Peak(Scan) | RF | -32.6 | -13.2 | Pass | Noise Floor |
| 34325.227 | -70.9 | 0.9 | 20.7 | -49.3 | Peak(Scan) | RF | -32.6 | -16.7 | Pass | Noise Floor |
| 26927.024 | -75.7 | 0.8 | 20.3 | -54.6 | Peak(Scan) | RF | -32.6 | -22 | Pass | Noise Floor |
| 6760.552 | -78.4 | 0.4 | 19.8 | -58.2 | Peak(Scan) | RF | -32.6 | -25.6 | Pass | Noise Floor |
| 5065.583 | -82.6 | 0.4 | 19.8 | -62.5 | Peak(Scan) | RF | -32.6 | -29.9 | Pass | |
| 4495.578 | -74.9 | 0.4 | 19.8 | -54.8 | Peak(Scan) | RF | -32.6 | -22.2 | Pass | |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 2001.217 | -83.8 | 0.2 | 19.8 | -63.8 | Peak(Scan) | RF | -32.6 | -31.2 | Pass | Noise Floor |
| 4455.565 | -72.7 | 0.4 | 19.8 | -52.6 | Peak(Scan) | RF | -32.6 | -20 | Pass | |
| 6958.935 | -79 | 0.4 | 19.8 | -58.8 | Peak(Scan) | RF | -32.6 | -26.2 | Pass | Noise floor |
| 28114.012 | -73.1 | 0.9 | 20.4 | -51.8 | Peak(Scan) | RF | -32.6 | -19.2 | Pass | Noise floor |
| 34339.855 | -71.6 | 0.9 | 20.7 | -50 | Peak(Scan) | RF | -32.6 | -17.4 | Pass | Noise Floor |
| 38578.839 | -68.1 | 1 | 20.4 | -46.6 | Peak(Scan) | RF | -32.6 | -14 | Pass | Noise floor |

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Conducted Spurious Emissions

15.407 & RSS-210(A9.3):

For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.

For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27dBm/MHz.



Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 4415.474 | -71.8 | 1.6 | 19.8 | -50.3 | Peak(Scan) | RF | -27 | -23.3 | Pass | |
| 6289.095 | -71.7 | 0.5 | 19.8 | -51.4 | Peak(Scan) | RF | -27 | -24.4 | Pass | |
| 6861.989 | -73.3 | 0.5 | 19.8 | -53 | Peak(Scan) | RF | -27 | -26 | Pass | Noise floor |
| 26927.024 | -65.5 | 0 | 20.3 | -45.2 | Peak(Scan) | RF | -27 | -18.2 | Pass | Noise floor |
| 34392.986 | -60.9 | 0 | 20.7 | -40.2 | Peak(Scan) | RF | -27 | -13.2 | Pass | Noise floor |
| 38498.121 | -56.8 | 0 | 20.5 | -36.4 | Peak(Scan | RF | -27 | -9.4 | Pass | Noise floor |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 4317.838 | -75 | 1.6 | 19.8 | -53.6 | Peak(Scan) | RF | -27 | -26.6 | Pass | |
| 6034.754 | -68.8 | 0.5 | 19.8 | -48.5 | Peak(Scan) | RF | -27 | -21.5 | Pass | |
| 6861.989 | -70.9 | 0.5 | 19.8 | -50.6 | Peak(Scan) | RF | -27 | -23.6 | Pass | Noise floor |
| 26927.024 | -65.3 | 0 | 20.3 | -45 | Peak(Scan) | RF | -27 | -18 | Pass | Noise floor |
| 34292.861 | -60.5 | 0 | 20.7 | -39.8 | Peak(Scan | RF | -27 | -12.8 | Pass | Noise floor |
| 38578.221 | -56.9 | 0 | 20.4 | -36.5 | Peak(Scan | RF | -27 | -9.5 | Pass | Noise floor |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 5841.277 | -69.8 | 2.2 | 19.8 | -47.8 | Peak(Scan) | RF | -27 | -20.8 | Pass | |
| 6861.989 | -71.3 | 0.5 | 19.8 | -51 | Peak(Scan) | RF | -27 | -24 | Pass | Noise floor |
| 22493.907 | -75.7 | 1.1 | 20.2 | -54.4 | Peak(Scan) | RF | -27 | -27.4 | Pass | Noise floor |
| 26927.024 | -65.7 | 0 | 20.3 | -45.4 | Peak(Scan) | RF | -27 | -18.4 | Pass | Noise floor |
| 34332.911 | -60.4 | 0 | 20.7 | -39.8 | Peak(Scan) | RF | -27 | -12.8 | Pass | Noise floor |
| 38578.221 | -56.6 | 0 | 20.4 | -36.2 | Peak(Scan) | RF | -27 | -9.2 | Pass | Noise floor |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 5476.814 | -67.3 | 1.9 | 19.8 | -45.6 | Peak(Scan) | RF | -27 | -18.6 | Pass | |
| 6711.491 | -70.4 | 0.5 | 19.8 | -50.1 | Peak(Scan) | RF | -27 | -23.1 | Pass | Noise floor |
| 22048.28 | -75.1 | 1.4 | 20.2 | -53.5 | Peak(Scan) | RF | -27 | -26.5 | Pass | noise floor |
| 26812.06 | -63.9 | 0 | 20.4 | -43.5 | Peak(Scan) | RF | -27 | -16.5 | Pass | Noise floor |
| 34332.911 | -60.8 | 0 | 20.7 | -40.1 | Peak(Scan) | RF | -27 | -13.1 | Pass | Noise floor |
| 38518.146 | -56.8 | 0 | 20.4 | -36.4 | Peak(Scan) | RF | -27 | -9.4 | Pass | Noise floor |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 6861.989 | -73.1 | 0.5 | 19.8 | -52.8 | Peak(Scan) | RF | -27 | -25.8 | Pass | Noise floor |
| 14475.082 | -75.6 | 0.8 | 20 | -54.8 | Peak(Scan) | RF | -27 | -27.8 | Pass | Noise floor |
| 22059.9 | -76.2 | 1.4 | 20.2 | -54.6 | Peak(Scan) | RF | -27 | -27.6 | Pass | Noise floor |
| 26677.205 | -64.7 | 0 | 20.4 | -44.4 | Peak(Scan) | RF | -27 | -17.4 | Pass | Noise floor |
| 34390.325 | -61.1 | 0 | 20.7 | -40.4 | Peak(Scan) | RF | -27 | -13.4 | Pass | Noise floor |
| 39899.875 | -56.5 | 0 | 20.1 | -36.4 | Peak(Scan) | RF | -27 | -9.4 | Pass | Noise floor |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 6861.989 | -73.1 | 0.5 | 19.8 | -52.8 | Peak(Scan) | RF | -27 | -25.8 | Pass | Noise floor |
| 14475.082 | -75.6 | 0.8 | 20 | -54.8 | Peak(Scan) | RF | -27 | -27.8 | Pass | Noise floor |
| 22059.9 | -76.2 | 1.4 | 20.2 | -54.6 | Peak(Scan) | RF | -27 | -27.6 | Pass | Noise floor |
| 26677.205 | -64.7 | 0 | 20.4 | -44.4 | Peak(Scan) | RF | -27 | -17.4 | Pass | Noise floor |
| 34390.325 | -61.1 | 0 | 20.7 | -40.4 | Peak(Scan) | RF | -27 | -13.4 | Pass | Noise floor |
| 39899.875 | -56.5 | 0 | 20.1 | -36.4 | Peak(Scan) | RF | -27 | -9.4 | Pass | Noise floor |

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Test Results Table

| Frequency MHz | Raw dBm | Cable Loss | Factors dB | Level dBm | Measurement Type | Line | Limit dBm | Margin dB | Pass /Fail | Comments |
|---------------|---------|------------|------------|-----------|------------------|------|-----------|-----------|------------|-------------|
| 1212.54 | -77.2 | 0.8 | 19.8 | -56.7 | Peak(Scan) | RF | -27 | -29.7 | Pass | |
| 1873.084 | -76.8 | 1 | 19.8 | -56 | Peak(Scan) | RF | -27 | -29 | Pass | |
| 6974.235 | -71.7 | 0.5 | 19.8 | -51.3 | Peak(Scan) | RF | -27 | -24.3 | Pass | noise floor |
| 14465.676 | -74.6 | 0.8 | 20 | -53.8 | Peak(Scan) | RF | -27 | -26.8 | Pass | noise floor |
| 22127.734 | -75.2 | 1.2 | 20.2 | -53.8 | Peak(Scan) | RF | -27 | -26.8 | Pass | noise floor |
| 34372.961 | -60.6 | 0 | 20.7 | -39.9 | Peak(Scan) | RF | -27 | -12.9 | Pass | Noise floor |
| 38538.171 | -56.3 | 0 | 20.4 | -35.9 | Peak(Scan) | RF | -27 | -8.9 | Pass | Noise Floor |

Page No: 39 of 131



Physical Test arrangement Photograph:



Comments on the above Photograph:

No further comments

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Radiated Transmitter Spurious Emissions

15.205

Radiated emissions which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a)

RSS-210

Radiated emissions which fall in the restricted bands, as defined in Sec. 2.7-Table 1 must also comply with the radiated emission limits specified in Sec. 2.7-Table 2.

| Subtest Number: 23509 | - 2 Subtest Date: 26-Sep-2006 |
|---------------------------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE Peak 1GHz to 18GHz (5180MHz) |
| Subtest Result | Pass |
| Highest Frequency | 18000.0 |
| Lowest Frequency | 1000.0 |
| Comments on the above Test Results | No further comments |

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



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Test Results Table

| Frequency | Raw | Cable | AF dB | Level | Measureme | Pol | Hgt | Azt | Limit | Margin | Pass /Fail | Comments |
|-----------|------|-------|-------|--------|------------|-----|-----|-----|--------|--------|------------|-------------|
| MHz | dBuV | Loss | | dBuV/m | nt Type | | cm | Deg | dBuV/m | dB | | |
| 17777.293 | 41.5 | 12.8 | 11.3 | 65.5 | Peak(Scan) | Η | 200 | 0 | 74 | -8.5 | Pass | noise floor |
| 14266.999 | 42 | 11.3 | 7.6 | 60.9 | Peak(Scan) | V | 150 | 0 | 74 | -13.1 | Pass | noise floor |
| 1095.461 | 58.2 | 2.7 | -11.5 | 49.4 | Peak(Scan) | V | 100 | 363 | 74 | -24.6 | Pass | |
| 1195.536 | 57.2 | 2.9 | -10.9 | 49.3 | Peak(Scan) | V | 100 | 363 | 74 | -24.7 | Pass | |
| 1000.077 | 58.2 | 2.6 | -12.5 | 48.4 | Peak(Scan) | V | 100 | 363 | 74 | -25.6 | Pass | |
| 1296.974 | 55.7 | 2.9 | -10.6 | 48 | Peak(Scan) | V | 100 | 363 | 74 | -26 | Pass | |

Page No: 42 of 131



| Subtest Number: 23509 | 9 - 3 Subtest Date: 26-Sep-2006 |
|---------------------------------------|---|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 18GHz to 26GHz Peak (5180MHz) |
| Subtest Result | Pass |
| Highest Frequency | 26499.999 |
| Lowest Frequency | 18000.0 |
| Comments on the above Test Results | No further comments |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



| Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dBuV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBuV/m | Margin dB | Pass /Fail | Comments |
|---------------|----------|------------|-------|--------------|------------------|-----|--------|---------|--------------|-----------|------------|----------|
| 26367.724 | 42.4 | 0 | 16.1 | 58.5 | Peak(Scan) | Н | 100 | 0 | 83.5 | -25 | Pass | |
| 24813.813 | 42.3 | 0 | 15.6 | 58 | Peak(Scan) | Η | 100 | 0 | 83.5 | -25.5 | Pass | |
| 23965.425 | 41.8 | 0 | 14.8 | 56.6 | Peak(Scan) | Н | 100 | 0 | 83.5 | -26.9 | Pass | |
| 20646.566 | 39.3 | 0 | 13.7 | 53 | Peak(Scan) | V | 100 | 0 | 83.5 | -30.5 | Pass | |
| 23236.441 | 38.6 | 0 | 14.4 | 53 | Peak(Scan) | V | 100 | 0 | 83.5 | -30.6 | Pass | |



| Subtest Number: 23509 | 9 - 4 Subtest Date: 26-Sep-2006 |
|---------------------------------------|---|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 26GHz to 40GHz Peak (5180MHz) |
| Subtest Result | Pass |
| Highest Frequency | 40000.0 |
| Lowest Frequency | 26500.0 |
| Comments on the above Test Results | No further comments |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

Frequency MHzRaw dBuVCable LossAF dBLevel dBuV/mMeasurement TypePolHgt cmAzt DegLimit dBuV/mMargin dBPass /FaiiComments

| | | | | | - | | - | - | | - | | |
|-----------|------|---|------|------|------------|---|-----|---|------|-------|------|--|
| 26500 | 77 | 0 | -7.5 | 69.5 | Peak(Scan) | Η | 100 | 0 | 83.5 | -14 | Pass | |
| 37532.523 | 54.6 | 0 | 2.7 | 57.3 | Peak(Scan) | Н | 100 | 0 | 83.5 | -26.2 | Pass | |
| 37247.853 | 54.8 | 0 | 2.4 | 57.2 | Peak(Scan) | V | 100 | 0 | 83.5 | -26.3 | Pass | |
| 33303.044 | 50.5 | 0 | 3.2 | 53.8 | Peak(Scan) | V | 100 | 0 | 83.5 | -29.7 | Pass | |

Page No: 44 of 131



| Subtest Number: 23509 | 9 - 5 Subtest Date: 26-Sep-2006 |
|---------------------------------------|---|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 1GHz to 10GHz Average (5180MHz) |
| Subtest Result | Pass |
| Highest Frequency | 10000.0 |
| Lowest Frequency | 1000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



| Frequency | Raw dBuV | Cable | AF dB | Level dBu\//m | Measureme | Pol | Hgt cm | Azt Deg | Limit dBuV/m | Margin dB | Pass /Fail | Comments |
|-----------|--------------|-------------|-------|------------------|-----------|-----|-----------|------------|-----------------|--------------|------------|-------------|
| 0042.055 | 0DUV 21 7 | LU33 0 7 | 1 / | 42 | пстурс | | 100 | DCy | | uD 10 | Deee | noice floor |
| 9943.800 | 31.7 | 8.7 | 1.0 | 42 | AV | п | 100 | 0 | 54 | -12 | Pass | noise nooi |
| 3890.05 | 39.4 | 5.2 | -2.9 | 41.7 | Av | Н | 139 | 186 | 54 | -12.3 | Pass | |
| 1600.749 | 41.6 | 3.3 | -10.3 | 34.6 | Av | V | 100 | 0 | 54 | -19.4 | Pass | |
| 1376.177 | 40.7 | 3 | -10.5 | 33.2 | Av | V | 100 | 363 | 54 | -20.8 | Pass | |
| 1095.386 | 40.7 | 2.7 | -11.5 | 31.9 | Av | V | 100 | 363 | 54 | -22.1 | Pass | |
| 1499.688 | 40.2 | 3.2 | -10.3 | 33 | Av | V | 100 | 363 | 54 | -21 | Pass | |



| Subtest Number: 23509 | 9 - 6 Subtest Date: 26-Sep-2006 |
|---------------------------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 10GHz to 18GHz Average (5180MHz) |
| Subtest Result | Pass |
| Highest Frequency | 18000.0 |
| Lowest Frequency | 10000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|-------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 17975.047 | 29.2 | 12.8 | 11.3 | 53.2 | Av | V | 100 | 0 | 63.5 | -10.3 | Pass | Noise Floor |
| 17350.739 | 28.7 | 12.2 | 7.8 | 48.8 | Av | V | 100 | 0 | 63.5 | -14.7 | Pass | Noise Floor |
| 14291.953 | 29.3 | 11.3 | 7.5 | 48 | Av | V | 100 | 0 | 63.5 | -15.5 | Pass | Noise Floor |
| 13054.676 | 28.1 | 10.1 | 5.5 | 43.7 | Av | Н | 100 | 0 | 63.5 | -19.8 | Pass | |
| 11620.428 | 29.5 | 9.4 | 3.8 | 42.7 | Av | Н | 100 | 0 | 63.5 | -20.8 | Pass | |
| 10103.394 | 29.7 | 8.8 | 1.7 | 40.3 | Av | Н | 100 | 0 | 63.5 | -23.2 | Pass | |

Page No: 46 of 131



| Subtest Number: 23509 | 9 - 7 Subtest Date: 26-Sep-2006 | | | | | | |
|------------------------------------|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | |
| Subtest Results | | | | | | | |
| Subtest Title | 11A RSE 18GHz to 26GHz Average (5180MHz) | | | | | | |
| Subtest Result | Pass | | | | | | |
| Highest Frequency | 26499.999 | | | | | | |
| Lowest Frequency | 18000.0 | | | | | | |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26298.502 | 31.1 | 0 | 16.1 | 47.2 | Avg | Η | 100 | 0 | 63.5 | -16.3 | Pass | |
| 24869.844 | 30.9 | 0 | 15.8 | 46.7 | Avg | Н | 100 | 0 | 63.5 | -16.8 | Pass | |
| 23956.304 | 30.4 | 0 | 14.8 | 45.2 | Avg | V | 100 | 0 | 63.5 | -18.3 | Pass | |
| 23106.543 | 28.9 | 0 | 14.4 | 43.3 | Avg | Н | 100 | 0 | 63.5 | -20.2 | Pass | |
| 20508.279 | 28.4 | 0 | 13.9 | 42.3 | Avg | V | 100 | 0 | 63.5 | -21.2 | Pass | |

Page No: 47 of 131



| Subtest Number: 23509 | 9 - 8 Subtest Date: 26-Sep-2006 |
|------------------------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 26GHz to 40GHz Average (5180MHz) |
| Subtest Result | Pass |
| Highest Frequency | 40000.0 |
| Lowest Frequency | 26500.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26500 | 66.6 | 0 | -7.5 | 59.1 | Avg | V | 100 | 0 | 63.5 | -4.4 | Pass | |
| 37203.993 | 43.4 | 0 | 2.4 | 45.8 | Avg | V | 100 | 0 | 63.5 | -17.7 | Pass | |
| 33263.3 | 38.7 | 0 | 3 | 41.8 | Avg | V | 100 | 0 | 63.5 | -21.7 | Pass | |
| 31164.543 | 38.9 | 0 | 0.2 | 39.1 | Avg | V | 100 | 0 | 63.5 | -24.4 | Pass | |

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| Subtest Number: 23509 | - 9 Subtest Date: 26-Sep-2006 |
|------------------------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 1GHz to 18GHz PEAK (5200MHz) |
| Subtest Result | Pass |
| Highest Frequency | 18000.0 |
| Lowest Frequency | 1000.0 |
| Comments on the above Test Results | No further comments |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

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| Ti | e: RSE 5200MHz 6Mbps Peak |

Test Results Table

| Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dBuV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBuV/m | qw | Pass /Fail | Comments |
|---------------|----------|------------|-------|--------------|------------------|-----|--------|---------|--------------|-------|------------|-------------|
| 17915.159 | 41.4 | 12.8 | 11.2 | 65.3 | Peak(Scan) | V | 150 | 0 | 74 | -8.7 | Pass | noise floor |
| 14404.866 | 41.2 | 11.5 | 7.1 | 59.9 | Peak(Scan) | V | 200 | 0 | 74 | -14.1 | Pass | noise floor |
| 5203.018 | 45.7 | 6.1 | -2 | 49.9 | Peak(Scan) | V | 98 | -3 | 74 | -24.1 | Pass | |
| 1191.055 | 57.2 | 2.9 | -10.8 | 49.3 | Peak(Scan) | Η | 98 | -3 | 74 | -24.7 | Pass | |
| 1095.395 | 57.6 | 2.7 | -11.5 | 48.8 | Peak(Scan) | V | 98 | -3 | 74 | -25.2 | Pass | |
| 1000 | 56.9 | 2.6 | -12.5 | 47 | Peak(Scan) | V | 98 | -3 | 74 | -27 | Pass | |



| Subtest Number: 23509 | 9 - 10 Subtest Date: 26-Sep-2006 |
|------------------------------------|---|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 18GHz to 26GHz PEAK (5200MHz) |
| Subtest Result | Pass |
| Highest Frequency | 26499.999 |
| Lowest Frequency | 18000.0 |
| Comments on the above Test Results | No further comments |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

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| Title | e: RSE_11A_Tx_5200_18-26GHz | |

Test Results Table

| Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dBuV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBuV/m | Margin dB | Pass /Fail | Comments |
|---------------|----------|------------|-------|--------------|------------------|-----|--------|---------|--------------|-----------|------------|----------|
| 26304.745 | 42.3 | 0 | 16.1 | 58.4 | Peak(Scan) | Н | 100 | 0 | 83.5 | -25.1 | Pass | |
| 24849.939 | 42.2 | 0 | 15.8 | 57.9 | Peak(Scan) | Н | 100 | 0 | 83.5 | -25.6 | Pass | |
| 23993.306 | 41.4 | 0 | 14.7 | 56.1 | Peak(Scan) | Н | 100 | 0 | 83.5 | -27.4 | Pass | |
| 20503.337 | 39.4 | 0 | 13.9 | 53.3 | Peak(Scan) | Н | 100 | 0 | 83.5 | -30.2 | Pass | |
| 19575.503 | 39.2 | 0 | 13.4 | 52.6 | Peak(Scan) | V | 100 | 0 | 83.5 | -30.9 | Pass | |

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| Subtest Number: 23509 | 9 - 11 Subtest Date: 26-Sep-2006 |
|-----------------------|---|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 26GHz to 40GHz PEAK (5200MHz) |
| Subtest Result | Pass |
| Highest Frequency | 40000.0 |
| Lowest Frequency | 26500.0 |
| Comments on the | No further comments |
| above rest Results | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

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| T :0 | | |
| I Itle | e: RSE_11A_1X_5200_26-40GHZ | |

Test Results Table

| Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dBuV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBuV/m | Margin dB | Pass /Fail | Comments |
|---------------|----------|------------|-------|--------------|------------------|-----|--------|---------|--------------|-----------|------------|----------|
| 26500 | 77.2 | C | -7.5 | 69.6 | Peak(Scan | Н | 100 | 0 0 | 83.5 | -13.8 | Pass | |
| 37172.022 | 54.1 | C | 2.4 | 56.5 | Peak(Scan) | Н | 100 | 0 0 | 83.5 | -27 | Pass | |
| 37514.249 | 53.3 | C | 2.7 | 56 | Peak(Scan) | V | 100 | 0 0 | 83.5 | -27.5 | Pass | |
| 33313.914 | 50.3 | C | 3.2 | 53.5 | Peak(Scan) | V | 100 | 0 0 | 83.5 | -30 | Pass | |

Page No: 51 of 131



| Subtest Number: 23509 | 9 - 12 Subtest Date: 26-Sep-2006 |
|------------------------------------|---|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 1GHz to 10GHz AVERAGE (5200MHz) |
| Subtest Result | Pass |
| Highest Frequency | 10000.0 |
| Lowest Frequency | 1000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

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| Title: rse 5200mhz 6mbps | s AVG 1-10G | |

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|-------|--------|-------------|-----|-----|-----|--------|--------|-------|-------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 9943.855 | 31.7 | 8.7 | 1.6 | 42 | Av | Η | 100 | 0 | 54 | -12 | Pass | noise floor |
| 3970 | 39.3 | 5.2 | -3.1 | 41.4 | Av | Η | 154 | 178 | 54 | -12.6 | Pass | |
| 5200.698 | 36 | 6.1 | -2 | 40.1 | Av | V | 98 | 363 | 54 | -13.9 | Pass | |
| 1499.678 | 40.9 | 3.2 | -10.3 | 33.8 | Av | V | 98 | 363 | 54 | -20.2 | Pass | |
| 1106.661 | 42.1 | 2.7 | -11.4 | 33.4 | Av | V | 98 | 363 | 54 | -20.6 | Pass | |
| 1477.286 | 40.2 | 3.1 | -10.6 | 32.8 | Av | V | 98 | 104 | 54 | -21.2 | Pass | |

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| Subtest Number: 23509 | 9 - 13 Subtest Date: 26-Sep-2006 |
|------------------------------------|---|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 10GHz to 18GHz AVERAGE (5200MHz) |
| Subtest Result | Pass |
| Highest Frequency | 18000.0 |
| Lowest Frequency | 10000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

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| Title: rse 5200mhz | 6mbps avg 10-18g | | |

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|-------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 17965.066 | 29.1 | 12.8 | 11.3 | 53.2 | Av | Н | 100 | 0 | 63.5 | -10.3 | Pass | Noise Floor |
| 14291.953 | 29.2 | 11.3 | 7.5 | 48 | Av | V | 100 | 0 | 63.5 | -15.5 | Pass | Noise Floor |
| 13004.894 | 28.7 | 10.1 | 5.3 | 44 | Av | V | 100 | 0 | 63.5 | -19.5 | Pass | |
| 11576.116 | 29.7 | 9.4 | 3.7 | 42.8 | Av | Н | 100 | 0 | 63.5 | -20.7 | Pass | |
| 10627.245 | 29.4 | 9.3 | 2.5 | 41.1 | Av | Н | 100 | 0 | 63.5 | -22.4 | Pass | |
| 10079.667 | 30.5 | 8.8 | 1.7 | 41 | Av | V | 100 | 0 | 63.5 | -22.5 | Pass | |



| Subtest Number: 23509 | 9 - 14 Subtest Date: 26-Sep-2006 |
|------------------------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 18GHz to 26GHz AVERAGE (5200MHz) |
| Subtest Result | Pass |
| Highest Frequency | 26499.999 |
| Lowest Frequency | 18000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

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| Title | e: rse_11a_tx_5200_18-26GHz_AVE | |

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26309.107 | 31.2 | 0 | 16.1 | 47.3 | Avg | Н | 100 | 0 | 63.5 | -16.2 | Pass | |
| 24825.118 | 31.3 | 0 | 15.6 | 47 | Avg | V | 100 | 0 | 63.5 | -16.5 | Pass | |
| 23929.229 | 30.5 | 0 | 14.8 | 45.3 | Avg | Η | 100 | 0 | 63.5 | -18.2 | Pass | |
| 23105.873 | 28.8 | 0 | 14.4 | 43.2 | Avg | V | 100 | 0 | 63.5 | -20.3 | Pass | |
| 20505.306 | 28.4 | 0 | 13.9 | 42.3 | Avg | V | 100 | 0 | 63.5 | -21.2 | Pass | |



| Subtest Number: 23509 | 9 - 15 Subtest Date: 26-Sep-2006 |
|------------------------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 26GHz to 40GHz AVERAGE (5200MHz) |
| Subtest Result | Pass |
| Highest Frequency | 40000.0 |
| Lowest Frequency | 26500.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

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| l itle | e: rse_11a_tx_5200_26-40GHz_AVE | |

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26500 | 66.4 | 0 | -7.5 | 58.8 | Avg | ۷ | 100 | 0 | 63.5 | -4.7 | Pass | |
| 37330.318 | 43.3 | 0 | 2.5 | 45.8 | Avg | V | 100 | 0 | 63.5 | -17.7 | Pass | |
| 33189.396 | 38.9 | 0 | 2.9 | 41.8 | Avg | Н | 100 | 0 | 63.5 | -21.7 | Pass | |
| 31156.261 | 38.8 | 0 | 0.1 | 39 | Avg | V | 100 | 0 | 63.5 | -24.5 | Pass | |

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| Subtest Number: 23509 | - 9 Subtest Date: 26-Sep-2006 | | | | | | | |
|------------------------------------|--|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | |
| Subtest Results | | | | | | | | |
| Subtest Title | 802.11A RSE 1GHz to 18GHz PEAK (5260MHz) | | | | | | | |
| Subtest Result | Pass | | | | | | | |
| Highest Frequency | 18000.0 | | | | | | | |
| Lowest Frequency | 1000.0 | | | | | | | |
| Comments on the above Test Results | No further comments | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

| Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dBuV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBuV/m | qw | Pass /Fail | Comments |
|---------------|----------|------------|-------|--------------|------------------|-----|--------|---------|--------------|-------|------------|-------------|
| 17915.159 | 41.4 | 12.8 | 11.2 | 65.3 | Peak(Scan) | V | 150 | 0 | 74 | -8.7 | Pass | noise floor |
| 14404.866 | 41.2 | 11.5 | 7.1 | 59.9 | Peak(Scan) | V | 200 | 0 | 74 | -14.1 | Pass | noise floor |
| 5263.018 | 45.7 | 6.1 | -2 | 49.9 | Peak(Scan) | V | 98 | -3 | 74 | -24.1 | Pass | fundemental |
| 1191.055 | 57.2 | 2.9 | -10.8 | 49.3 | Peak(Scan) | Н | 98 | -3 | 74 | -24.7 | Pass | |
| 1095.395 | 57.6 | 2.7 | -11.5 | 48.8 | Peak(Scan) | V | 98 | -3 | 74 | -25.2 | Pass | |
| 1000 | 56.9 | 2.6 | -12.5 | 47 | Peak(Scan) | V | 98 | -3 | 74 | -27 | Pass | |

Subtest Number: 23509 - 10

Subtest Date: 26-Sep-2006

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| Engineer | Phillip Carranco | | | | | | | |
|---------------------------------------|---|--|--|--|--|--|--|--|
| Lab Information | Building I, 5m Anechoic | | | | | | | |
| Subtest Results | | | | | | | | |
| Subtest Title | 802.11A RSE 18GHz to 26GHz PEAK (5260MHz) | | | | | | | |
| Subtest Result | Pass | | | | | | | |
| Highest Frequency | 26499.999 | | | | | | | |
| Lowest Frequency | 18000.0 | | | | | | | |
| Comments on the above Test Results | No further comments | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



| Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dBuV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBuV/m | Margin dB | Pass /Fail | Comments |
|---------------|----------|------------|-------|--------------|------------------|-----|--------|---------|--------------|-----------|------------|----------|
| 26304.745 | 42.3 | 0 | 16.1 | 58.4 | Peak(Scan) | Η | 100 | 0 | 83.5 | -25.1 | Pass | |
| 24849.939 | 42.2 | 0 | 15.8 | 57.9 | Peak(Scan) | Η | 100 | 0 | 83.5 | -25.6 | Pass | |
| 23993.306 | 41.4 | 0 | 14.7 | 56.1 | Peak(Scan) | Η | 100 | 0 | 83.5 | -27.4 | Pass | |
| 20503.337 | 39.4 | 0 | 13.9 | 53.3 | Peak(Scan) | Η | 100 | 0 | 83.5 | -30.2 | Pass | |
| 19575.503 | 39.2 | 0 | 13.4 | 52.6 | Peak(Scan) | V | 100 | 0 | 83.5 | -30.9 | Pass | |



| Subtest Number: 23509 | 9 - 11 Subtest Date: 26-Sep-2006 | | | | | | | |
|---------------------------------------|---|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | |
| Subtest Results | | | | | | | | |
| Subtest Title | 802.11A RSE 26GHz to 40GHz PEAK (5260MHz) | | | | | | | |
| Subtest Result | Pass | | | | | | | |
| Highest Frequency | 40000.0 | | | | | | | |
| Lowest Frequency | 26500.0 | | | | | | | |
| Comments on the above Test Results | No further comments | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



| Frequency MHz | Raw dBuV | Cable Loss | AF dB | Level dBuV/m | Measurement Type | Pol | Hgt cm | Azt Deg | Limit dBuV/m | Margin dB | Pass /Fail | Comments |
|---------------|----------|------------|-------|--------------|------------------|-----|--------|---------|--------------|-----------|------------|----------|
| 26500 | 77.2 | C | -7.5 | 69.6 | Peak(Scan | Η | 100 | 0 | 83.5 | -13.8 | Pass | |
| 37172.022 | 54.1 | C | 2.4 | 56.5 | Peak(Scan) | Η | 100 | 0 | 83.5 | -27 | Pass | |
| 37514.249 | 53.3 | C | 2.7 | 56 | Peak(Scan) | V | 100 | 0 | 83.5 | -27.5 | Pass | |
| 33313.914 | 50.3 | C | 3.2 | 53.5 | Peak(Scan) | V | 100 | 0 | 83.5 | -30 | Pass | |

| Subtest Number: 23509 | - 12 Subtest Date: 26-Sep-2006 | | | | | | | | |
|------------------------------------|---|--|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | | |
| Subtest Results | | | | | | | | | |
| Subtest Title | 802.11A RSE 1GHz to 10GHz AVERAGE (5260MHz) | | | | | | | | |
| Subtest Result | Pass | | | | | | | | |
| Highest Frequency | 10000.0 | | | | | | | | |
| Lowest Frequency | 1000.0 | | | | | | | | |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW | | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|-------|--------|-------------|-----|-----|-----|--------|--------|-------|-------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 9943.855 | 31.7 | 8.7 | 1.6 | 42 | Av | Η | 100 | 0 | 54 | -12 | Pass | noise floor |
| 3970 | 39.3 | 5.2 | -3.1 | 41.4 | Av | Η | 154 | 178 | 54 | -12.6 | Pass | |
| 5265.698 | 36 | 6.1 | -2 | 40.1 | Av | V | 98 | 363 | 54 | -13.9 | Pass | fundemental |
| 1499.678 | 40.9 | 3.2 | -10.3 | 33.8 | Av | V | 98 | 363 | 54 | -20.2 | Pass | |
| 1106.661 | 42.1 | 2.7 | -11.4 | 33.4 | Av | V | 98 | 363 | 54 | -20.6 | Pass | |
| 1477.286 | 40.2 | 3.1 | -10.6 | 32.8 | Av | V | 98 | 104 | 54 | -21.2 | Pass | |

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| Subtest Number: 23509 | 9 - 13 Subtest Date: 26-Sep-2006 | | | | | | | | |
|------------------------------------|---|--|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | | |
| Subtest Results | | | | | | | | | |
| Subtest Title | 802.11A RSE 10GHz to 18GHz AVERAGE (5260MHz) | | | | | | | | |
| Subtest Result | Pass | | | | | | | | |
| Highest Frequency | 18000.0 | | | | | | | | |
| Lowest Frequency | 10000.0 | | | | | | | | |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW | | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|-------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 17965.066 | 29.1 | 12.8 | 11.3 | 53.2 | Av | Н | 100 | 0 | 63.5 | -10.3 | Pass | Noise Floor |
| 14291.953 | 29.2 | 11.3 | 7.5 | 48 | Av | V | 100 | 0 | 63.5 | -15.5 | Pass | Noise Floor |
| 13004.894 | 28.7 | 10.1 | 5.3 | 44 | Av | V | 100 | 0 | 63.5 | -19.5 | Pass | |
| 11576.116 | 29.7 | 9.4 | 3.7 | 42.8 | Av | Η | 100 | 0 | 63.5 | -20.7 | Pass | |
| 10627.245 | 29.4 | 9.3 | 2.5 | 41.1 | Av | Н | 100 | 0 | 63.5 | -22.4 | Pass | |
| 10079.667 | 30.5 | 8.8 | 1.7 | 41 | Av | V | 100 | 0 | 63.5 | -22.5 | Pass | |

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| Subtest Number: 23509 | 9 - 14 Subtest Date: 26-Sep-2006 |
|------------------------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 18GHz to 26GHz AVERAGE (5260MHz) |
| Subtest Result | Pass |
| Highest Frequency | 26499.999 |
| Lowest Frequency | 18000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26309.107 | 31.2 | 0 | 16.1 | 47.3 | Avg | Н | 100 | 0 | 63.5 | -16.2 | Pass | |
| 24825.118 | 31.3 | 0 | 15.6 | 47 | Avg | V | 100 | 0 | 63.5 | -16.5 | Pass | |
| 23929.229 | 30.5 | 0 | 14.8 | 45.3 | Avg | Η | 100 | 0 | 63.5 | -18.2 | Pass | |
| 23105.873 | 28.8 | 0 | 14.4 | 43.2 | Avg | V | 100 | 0 | 63.5 | -20.3 | Pass | |
| 20505.306 | 28.4 | 0 | 13.9 | 42.3 | Avg | V | 100 | 0 | 63.5 | -21.2 | Pass | |

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| Subtest Number: 23509 | - 15 Subtest Date: 26-Sep-2006 |
|-----------------------|--|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | 802.11A RSE 26GHz to 40GHz AVERAGE (5260MHz) |
| Subtest Result | Pass |
| Highest Frequency | 40000.0 |
| Lowest Frequency | 26500.0 |
| Comments on the | 1 MHz RBW, 10 Hz VBW |
| above rest Results | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26500 | 66.4 | 0 | -7.5 | 58.8 | Avg | V | 100 | 0 | 63.5 | -4.7 | Pass | |
| 37330.318 | 43.3 | 0 | 2.5 | 45.8 | Avg | V | 100 | 0 | 63.5 | -17.7 | Pass | |
| 33189.396 | 38.9 | 0 | 2.9 | 41.8 | Avg | Η | 100 | 0 | 63.5 | -21.7 | Pass | |
| 31156.261 | 38.8 | 0 | 0.1 | 39 | Avg | V | 100 | 0 | 63.5 | -24.5 | Pass | |

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| Cisco | SYSTEMS |
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| Subtest Number: 23509 | 9 - 16 Subtest Date: 26-Sep-2006 |
|---------------------------------------|----------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 1GHz to 18GHz PEAK (5320MHz) |
| Subtest Result | Pass |
| Highest Frequency | 18000.0 |
| Lowest Frequency | 1000.0 |
| Comments on the above Test Results | No further comments |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|-------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 17968.185 | 42.2 | 12.8 | 11.3 | 66.3 | Peak(Scan) | Η | 200 | 0 | 74 | -7.7 | Pass | Noise |
| | | | | | | | | | | | | Floor |
| 14383.656 | 42.2 | 11.4 | 7.2 | 60.8 | Peak(Scan) | V | 100 | 0 | 74 | -13.2 | Pass | Noise |
| | | | | | | | | | | | | Floor |
| 5475.319 | 47.3 | 6.2 | -1.7 | 51.8 | Peak(Scan) | V | 98 | -3 | 74 | -22.2 | Pass | |
| 1095.452 | 58.2 | 2.7 | -11.5 | 49.4 | Peak(Scan) | V | 98 | -3 | 74 | -24.6 | Pass | |
| 1191.125 | 56.5 | 2.9 | -10.8 | 48.5 | Peak(Scan) | V | 98 | -3 | 74 | -25.5 | Pass | |
| 1296.842 | 55.4 | 2.9 | -10.6 | 47.7 | Peak(Scan) | V | 98 | -3 | 74 | -26.3 | Pass | |

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| Subtest Number: 23509 | 9 - 17 Subtest Date: 26-Sep-2006 |
|------------------------------------|-----------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 18GHz to 26GHz PEAK (5320MHz) |
| Subtest Result | Pass |
| Highest Frequency | 26499.999 |
| Lowest Frequency | 18000.0 |
| Comments on the above Test Results | No further comments |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26378.047 | 42.4 | 0 | 16.1 | 58.5 | Peak(Scan) | V | 100 | 0 | 83.5 | -25 | Pass | |
| 24696.942 | 42.8 | 0 | 15.1 | 57.9 | Peak(Scan) | V | 100 | 0 | 83.5 | -25.6 | Pass | |
| 24977.923 | 41.8 | 0 | 15.6 | 57.4 | Peak(Scan) | Η | 100 | 0 | 83.5 | -26.1 | Pass | |
| 23922.952 | 42.4 | 0 | 14.8 | 57.1 | Peak(Scan) | V | 100 | 0 | 83.5 | -26.4 | Pass | |
| 20503.286 | 39.8 | 0 | 13.9 | 53.7 | Peak(Scan) | V | 100 | 0 | 83.5 | -29.8 | Pass | |

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| GHz PEAK (5320MHz) |
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Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26500 | 77.3 | 0 | -7.5 | 69.8 | Peak(Scan) | V | 100 | 0 | 83.5 | -13.7 | Pass | |
| 37264.809 | 54.8 | 0 | 2.5 | 57.3 | Peak(Scan) | Η | 100 | 0 | 83.5 | -26.2 | Pass | |
| 38256.708 | 53.5 | 0 | 3.3 | 56.9 | Peak(Scan) | Η | 100 | 0 | 83.5 | -26.6 | Pass | |
| 38880.709 | 53.3 | 0 | 2.3 | 55.6 | Peak(Scan) | Η | 100 | 0 | 83.5 | -27.9 | Pass | |
| 33389.974 | 49.6 | 0 | 3.6 | 53.1 | Peak(Scan) | V | 100 | 0 | 83.5 | -30.4 | Pass | |
| 33085.542 | 49.9 | 0 | 3.1 | 53 | Peak(Scan) | Η | 100 | 0 | 83.5 | -30.5 | Pass | |

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| Subtest Number: 23509 | 9 - 19 Subtest Date: 26-Sep-2006 |
|------------------------------------|-------------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 1GHz to 10GHz AVERAGE (5320MHz) |
| Subtest Result | Pass |
| Highest Frequency | 10000.0 |
| Lowest Frequency | 1000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|-------|--------|-------------|-----|-----|-----|--------|--------|-------|-------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 8059.97 | 35.5 | 7.9 | 0.6 | 44 | Av | V | 107 | 153 | 54 | -10 | Pass | |
| 5328.759 | 38.1 | 6.1 | -1.9 | 42.4 | Av | V | 150 | 0 | 54 | -11.6 | Pass | fundemental |
| 4030.05 | 39.9 | 5.3 | -3.3 | 42 | Av | Η | 136 | 186 | 54 | -12 | Pass | |
| 5482.11 | 37 | 6.2 | -1.7 | 41.5 | Av | V | 99 | 164 | 54 | -12.5 | Pass | |
| 1499.69 | 40.1 | 3.2 | -10.3 | 33 | Av | V | 98 | -3 | 54 | -21 | Pass | |
| 1123.204 | 41.1 | 2.7 | -11.2 | 32.6 | Av | V | 98 | -3 | 54 | -21.4 | Pass | |

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| Subtest Number: 23509 | 9 - 20 Subtest Date: 26-Sep-2006 |
|---------------------------------------|--------------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 10GHz to 18GHz AVERAGE (5320MHz) |
| Subtest Result | Pass |
| Highest Frequency | 18000.0 |
| Lowest Frequency | 10000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 17965.066 | 29.1 | 12.8 | 11.3 | 53.2 | Av | V | 100 | 0 | 63.5 | -10.4 | Pass | Noise |
| | | | | | | | | | | | | Floor |
| 14406.737 | 29.4 | 11.6 | 7.1 | 48 | Av | Η | 100 | 0 | 63.5 | -15.5 | Pass | Noise |
| | | | | | | | | | | | | Floor |
| 13016.365 | 28.7 | 10.1 | 5.3 | 44.1 | Av | Н | 100 | 0 | 63.5 | -19.4 | Pass | |
| 11771.671 | 29.6 | 9.5 | 4 | 43 | Av | Н | 100 | 0 | 63.5 | -20.5 | Pass | |
| 10740.28 | 29.2 | 9.4 | 2.6 | 41.2 | Av | Η | 100 | 0 | 63.5 | -22.3 | Pass | |
| 10073.744 | 30.6 | 8.8 | 1.7 | 41.1 | Av | V | 100 | 0 | 63.5 | -22.4 | Pass | |

| Subtest Number: 23509 | 9 - 21 Subtest Date: 26-Sep-2006 | | | | | | | |
|-----------------------|-------------------------------------|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | |
| Subtest Results | | | | | | | | |
| Subtest Title | SE 18GHz to 26GHz AVERAGE (5320MHz) | | | | | | | |
| Subtest Result | Pass | | | | | | | |
| Highest Frequency | 26499.999 | | | | | | | |
| Lowest Frequency | 18000.0 | | | | | | | |
| Comments on the | 1 MHz RBW, 10 Hz VBW | | | | | | | |
| above Test Results | | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26250.779 | 31.2 | 0 | 16.1 | 47.3 | Avg | V | 100 | 0 | 63.5 | -16.2 | Pass | |
| 24798.654 | 31.1 | 0 | 15.7 | 46.8 | Avg | Η | 100 | 0 | 63.5 | -16.7 | Pass | |
| 23945.485 | 30.4 | 0 | 14.8 | 45.2 | Avg | V | 100 | 0 | 63.5 | -18.3 | Pass | |
| 23109.897 | 29 | 0 | 14.4 | 43.4 | Avg | V | 100 | 0 | 63.5 | -20.1 | Pass | |
| 20502.563 | 28.6 | 0 | 13.9 | 42.5 | Avg | V | 100 | 0 | 63.5 | -21 | Pass | |

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| Subtest Number: 23509 | 9 - 22 Subtest Date: 26-Sep-2006 |
|-----------------------|--------------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 26GHz to 40GHz AVERAGE (5320MHz) |
| Subtest Result | Pass |
| Highest Frequency | 40000.0 |
| Lowest Frequency | 26500.0 |
| Comments on the | 1 MHz RBW, 10 Hz VBW |
| above Test Results | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26500 | 66.4 | 0 | -7.5 | 58.9 | Avg | V | 100 | 0 | 63.5 | -4.6 | Pass | |
| 37212.414 | 43.4 | 0 | 2.4 | 45.8 | Avg | Н | 100 | 0 | 63.5 | -17.7 | Pass | |
| 33405.761 | 38.3 | 0 | 3.6 | 42 | Avg | V | 100 | 0 | 63.5 | -21.5 | Pass | |
| 31154.721 | 38.8 | 0 | 0.1 | 38.9 | Avg | V | 100 | 0 | 63.5 | -24.6 | Pass | |

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| Cisco | SYSTEMS |
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| Subtest Number: 23509 | 9 - 23 Subtest Date: 26-Sep-2006 | | | | | | | |
|------------------------------------|----------------------------------|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | |
| Subtest Results | | | | | | | | |
| Subtest Title | RSE 1GHz to 18GHz PEAK (5500MHz) | | | | | | | |
| Subtest Result | Pass | | | | | | | |
| Highest Frequency | 18000.0 | | | | | | | |
| Lowest Frequency | 1000.0 | | | | | | | |
| Comments on the above Test Results | No further comments | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|-------|--------|-------------|-----|-----|-----|--------|--------|-------|----------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 17819.713 | 41.2 | 12.6 | 11.3 | 65.1 | Peak(Scan) | Н | 200 | 0 | 74 | -8.9 | Pass | Noise Floor |
| 14351.84 | 41.5 | 11.4 | 7.3 | 60.2 | Peak(Scan) | Η | 200 | 0 | 74 | -13.8 | Pass | Noise Floor |
| 5840.96 | 54.9 | 6.5 | -2 | 59.4 | Peak(Scan) | V | 121 | 159 | 74 | -14.6 | Pass | |
| 5506.937 | 49.1 | 6.2 | -1.7 | 53.6 | Peak(Scan) | V | 98 | -3 | 74 | -20.4 | Pass | Carrier |
| 1191.076 | 59.2 | 2.9 | -10.8 | 51.3 | Peak(Scan) | V | 98 | -3 | 74 | -22.7 | Pass | |
| 1095.501 | 57.7 | 2.7 | -11.5 | 48.9 | Peak(Scan) | V | 98 | -3 | 74 | -25.1 | Pass | |

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| Subtest Number: 23509 | 9 - 24 Subtest Date: 26-Sep-2006 | | | | | | | |
|---------------------------------------|-----------------------------------|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | |
| Subtest Results | | | | | | | | |
| Subtest Title | RSE 18GHz to 26GHz PEAK (5500MHz) | | | | | | | |
| Subtest Result | Pass | | | | | | | |
| Highest Frequency | 26499.999 | | | | | | | |
| Lowest Frequency | 18000.0 | | | | | | | |
| Comments on the above Test Results | No further comments | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Po | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26155.468 | 42.7 | 0 | 16.3 | 59.1 | Peak(Scan) | Н | 100 | 0 | 83.5 | -24.4 | Pass | |
| 24745.154 | 42.9 | 0 | 15.4 | 58.3 | Peak(Scan) | V | 100 | 0 | 83.5 | -25.2 | Pass | |
| 24639.481 | 42.9 | 0 | 14.7 | 57.6 | Peak(Scan) | Η | 100 | 0 | 83.5 | -25.9 | Pass | |
| 23979.847 | 41.5 | 0 | 14.8 | 56.3 | Peak(Scan) | V | 100 | 0 | 83.5 | -27.2 | Pass | |
| 20504.001 | 38.9 | 0 | 13.9 | 52.8 | Peak(Scan) | V | 100 | 0 | 83.5 | -30.7 | Pass | |

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| Subtest Number: 23509 | 9 - 25 Subtest Date: 26-Sep-2006 | | | | | | | |
|------------------------------------|-----------------------------------|--|--|--|--|--|--|--|
| Engineer | Phillip Carranco | | | | | | | |
| Lab Information | Building I, 5m Anechoic | | | | | | | |
| Subtest Results | | | | | | | | |
| Subtest Title | RSE 26GHz to 40GHz PEAK (5500MHz) | | | | | | | |
| Subtest Result | Pass | | | | | | | |
| Highest Frequency | 40000.0 | | | | | | | |
| Lowest Frequency | 26500.0 | | | | | | | |
| Comments on the above Test Results | No further comments | | | | | | | |

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26500 | 76.3 | 0 | -7.5 | 68.8 | Peak(Scan | V | 100 | 0 | 83.5 | -14.7 | Pass | |
| 38147.078 | 54.5 | 0 | 2.7 | 57.2 | Peak(Scan) | V | 100 | 0 | 83.5 | -26.3 | Pass | |
| 37483.395 | 54.1 | 0 | 2.8 | 56.9 | Peak(Scan) | Н | 100 | 0 | 83.5 | -26.6 | Pass | |
| 37563.413 | 53.6 | 0 | 2.9 | 56.4 | Peak(Scan) | V | 100 | 0 | 83.5 | -27.1 | Pass | |
| 33339.76 | 49.8 | 0 | 3.4 | 53.2 | Peak(Scan) | Н | 100 | 0 | 83.5 | -30.3 | Pass | |


| Subtest Number: 23509 | 9 - 26 Subtest Date: 26-Sep-2006 |
|-----------------------|-------------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 1GHz to 10GHz AVERAGE (5500MHz) |
| Subtest Result | Pass |
| Highest Frequency | 10000.0 |
| Lowest Frequency | 1000.0 |
| Comments on the | 1 MHz RBW, 10 Hz VBW |
| above Test Results | |

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|-------|--------|-------------|-----|-----|-----|--------|--------|-------|-------------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 8420.03 | 40.5 | 8.1 | 1 | 49.7 | Av | V | 124 | 283 | 54 | -4.3 | Pass | |
| 5840.44 | 40.6 | 6.5 | -2 | 45.1 | Av | V | 125 | 159 | 54 | -8.9 | Pass | |
| 5502.807 | 40.2 | 6.2 | -1.7 | 44.7 | Av | V | 100 | 0 | 54 | -9.3 | Pass | fundemental |
| 9949.47 | 31.8 | 8.7 | 1.6 | 42.1 | Av | V | 200 | 0 | 54 | -11.9 | Pass | noise floor |
| 4209.98 | 40.3 | 5.4 | -3.7 | 42 | Av | Н | 144 | 178 | 54 | -12 | Pass | |
| 1106.675 | 43 | 2.7 | -11.4 | 34.3 | Av | V | 150 | 0 | 54 | -19.7 | Pass | |

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| Subtest Number: 23509 | 9 - 27 Subtest Date: 26-Sep-2006 |
|------------------------------------|--------------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 10GHz to 18GHz AVERAGE (5500MHz) |
| Subtest Result | Pass |
| Highest Frequency | 18000.0 |
| Lowest Frequency | 10000.0 |
| Comments on the above Test Results | 1 MHz RBW, 10 Hz VBW |

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 17980.037 | 29.1 | 12.8 | 11.3 | 53.1 | Av | ۷ | 100 | 0 | 63.5 | -10.4 | Pass | Noise |
| | | | | | | | | | | | | Floor |
| 14476.606 | 29.6 | 11.6 | 7 | 48.3 | Av | Η | 100 | 0 | 63.5 | -15.2 | Pass | Noise |
| | | | | | | | | | | | | Floor |
| 12898.315 | 28.8 | 10 | 5 | 43.7 | Av | Н | 100 | 0 | 63.5 | -19.8 | Pass | |
| 11003.191 | 30.5 | 9.4 | 2.7 | 42.7 | Av | Η | 100 | 0 | 63.5 | -20.8 | Pass | |
| 10079.667 | 30.4 | 8.8 | 1.7 | 40.9 | Av | V | 100 | 0 | 63.5 | -22.6 | Pass | |
| 10459.92 | 29.4 | 9.1 | 2.1 | 40.7 | Av | Η | 100 | 0 | 63.5 | -22.8 | Pass | |



| Subtest Number: 23509 | 9 - 28 Subtest Date: 26-Sep-2006 |
|-----------------------|--------------------------------------|
| Engineer | Phillip Carranco |
| Lab Information | Building I, 5m Anechoic |
| Subtest Results | |
| Subtest Title | RSE 18GHz to 26GHz AVERAGE (5500MHz) |
| Subtest Result | Pass |
| Highest Frequency | 26499.999 |
| Lowest Frequency | 18000.0 |
| Comments on the | 1 MHz RBW, 10 Hz VBW |
| above rest Results | |

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Test Results Table

| Frequency | Raw | Cable | AF | Level | Measurement | Pol | Hgt | Azt | Limit | Margin | Pass | Comments |
|-----------|------|-------|------|--------|-------------|-----|-----|-----|--------|--------|-------|----------|
| MHz | dBuV | Loss | dB | dBuV/m | Туре | | cm | Deg | dBuV/m | dB | /Fail | |
| 26303.804 | 31.3 | 0 | 16.1 | 47.4 | Avg | Н | 100 | 0 | 63.5 | -16.1 | Pass | |
| 24827.59 | 31 | 0 | 15.6 | 46.7 | Avg | V | 100 | 0 | 63.5 | -16.8 | Pass | |
| 23923.169 | 30.4 | 0 | 14.8 | 45.2 | Avg | Η | 100 | 0 | 63.5 | -18.3 | Pass | |
| 23122.238 | 28.8 | 0 | 14.4 | 43.2 | Avg | Η | 100 | 0 | 63.5 | -20.3 | Pass | |
| 20505.24 | 28.4 | 0 | 13.9 | 42.3 | Avg | V | 100 | 0 | 63.5 | -21.2 | Pass | |

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