

*FCC PART 15, SUBPART B and SUBPART E
TEST REPORT*

for

802.11 A/B/G
WIRELESS ACCESS POINT

MODEL: ACCESS / ONE NETWORK

Prepared for

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DATE: AUGUST 5, 2003

	REPORT BODY	APPENDICES					TOTAL
		A	B	C	D	E	
PAGES	21	2	2	2	24	69	120

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GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST, or any other agency of the U.S. Government.

Device Tested: 802.11 a/b/g Wireless Access Point
Model: Access / One Network
S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was not modified during the testing.

Manufacturer: Strix Systems, Inc.
310 North Westlake Blvd., Suite 150
Westlake Village, California 91362

Test Dates: July 24, 28, and 29, 2003; August 12, 14, and 15, 2003

Test Specifications: EMI requirements
Limits: EN 55022: 1998 **Class A**; CFR Title 47, Part 15, Subpart B; and Subpart E

Test Procedure: ANSI C63.4: 2001

Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	Complies with the Class A limits of EN 55022: 1998; and the limits of CFR Title 47, Part 15, Subpart E
2	Spurious Radiated RF Emissions, 30 MHz – 1000 MHz	Complies with the Class A limits of EN 55022: 1998; and the limits of CFR Title 47, Part 15, Subpart E
3	Spurious Radiated RF Emissions, 10 kHz – 30 MHz and 1000 MHz – 40000 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart E
4	Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 10 kHz – 40 GHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart E
5	Emissions produced by the intentional radiator in restricted bands, 10 kHz – 40 GHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart E
6	Emission Bandwidth – 26 dB for UNII devices	Complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.403 [c]
8	Peak Power for UNII devices	Complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(1) and (a)(2)
9	Peak Power Spectral Density for UNII devices	Complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(1) and (a)(2)
10	Peak Excursion for UNII devices	Complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(6)

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the 802.11 a/b/g Wireless Access Point Model: Access / One Network. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2001. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart E.

Note: For the unintentional radiator portion of the test for conducted emissions and for radiated emissions from 30 MHz to 1000 MHz, the EUT was within the Class A specification limits defined by C.I.S.P.R. Publication 22 for Information Technology Equipment. Under paragraph E of section 15.107 and paragraph G of section 15.109 of the Code of Federal Regulations Title 47, Part 15 of the FCC rules, FCC accepts the international standards set forth in C.I.S.P.R. Publication 22.

Note: The 5.15 GHz to 5.25 GHz and 5.25 GHz to 5.35 GHz bands are applicable to this report; other bands of operation (2.4 and 5.8 GHz) are documented in the Compatible Electronics, Inc. report number **B30825D1**.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests of the testing described herein were performed at the test facility of Compatible Electronics at the following locations:

- 1) 114 Olinda Drive, Brea, California 92823
- 2) 2337 Troutdale Drive, Agoura, California 91301

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Strix Systems, Inc.

Eric Eustis Regulatory Compliance Engineer

Compatible Electronics, Inc.

Kyle Fujimoto Test Engineer

Scott McCutchan Lab Manager

2.4 Date Test Sample was Received

The test sample was received on July 23, 2003.

2.5 Disposition of the Test Sample

The sample has not been returned to Strix Systems, Inc. as of August 26, 2003.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart E	FCC Rules - Radio frequency devices (including digital devices) – Unlicensed National Information Infrastructure Devices
ANSI C63.4 2001	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
EN 55022: 1998	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement
CISPR 22: 1997	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - EMI

Setup and operation of the equipment under test.

Specifics of the EUT and Peripherals Tested

For the intentional radiator portion of the test - The 802.11 a/b/g Wireless Access Point Model: Access / One Network (EUT) was connected to the laptop and AC Adapter via its Ethernet and power ports, respectively. The laptop was also connected to an AC Adapter via its power port. The EUT was continuously transmitting and receiving. The laptop was used to set the parameters (802.11a, 802.11b, 802.11g, Turbo Mode, Normal Mode, and Channel) for the test.

For the digital portion of the test - The 802.11 a/b/g Wireless Access Point Model: Access / One Network (EUT) was connected to the power over LAN Hub by an Ethernet cable. The power over LAN hub was also connected to the EUT via the power over Ethernet port. The EUT was continuously sending and receiving data.

Note: The laptop was located inside the building, approximately 50 feet away from the test site.

The final radiated as well as the conducted data was taken in the mode above. Please see Appendix E for the data sheets.

4.1.1 Cable Construction and Termination

Cable 1 **(For Digital Portion only)** This is a 1.5 meter unshielded cable connecting the EUT's power over Ethernet port to the EUT's data and power port.

Cable 2 This is a 2 meter unshielded cable connecting the AC Adapter to the EUT. It has a 1/8 inch power connector at the EUT end and is hard wired into the AC Adapter.

Cable 3 **(For Tx Mode Only)** This is a 50 meter unshielded cable connecting the EUT to the laptop. It has RJ-45 connectors at each end.

Cable 4 **(For Tx Mode Only)** This is a 2 meter unshielded cable connecting the AC Adapter to the laptop. It has a 1/8 inch power connector at the laptop end and is hard wired into the AC Adapter.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT**5.1 EUT and Accessory List**

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
802.11 A/B/G WIRELESS ACCESS POINT (EUT)	STRIX SYSTEMS, INC.	ACCESS / ONE NETWORK	N/A	RFM-ACCESS-ONE
POWER OVER LAN HUB	POWER DSINE	POWER DSINE 6001	A03176040000202	N/A
AC ADAPTER FOR EUT	STRIX SYSTEMS, INC.	SA07111724	R00030500018	N/A
LAPTOP	IBM	TYPE 2662	FX-P9743	DoC
AC ADAPTER FOR LAPTOP	IBM	P/N: 02K6549	J16BA78942G	N/A

5.2 EMI Test Equipment for Brea Facility

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
Radiated Emissions Manual Test – Radiated	Compatible Electronics	N/A	N/A	N/A	N/A
Conducted Emissions Test Program	Compatible Electronics	N/A	N/A	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	2727A04757	Nov. 12, 2002	Nov. 12, 2003
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A15455	Nov. 12, 2002	Nov. 12, 2003
Spectrum Analyzer – Quasi-Peak Adapter	Hewlett Packard	85650A	3303A01688	Nov. 12, 2002	Nov. 12, 2003
Preamplifier	Com Power	PA-102	1017	Jan. 2, 2003	Jan. 2, 2004
Biconical Antenna	Com Power	AB-100	1548	Sept. 19, 2002	Sept. 19, 2003
Log Periodic Antenna	Com Power	AL-100	16089	Oct. 4, 2002	Oct. 4, 2003
Computer	Hewlett Packard	D5251A 888	US74458128	N/A	N/A
Harmonic Mixer	Hewlett Packard	11970A	3003A05460	Mar. 14, 2002	Mar. 14, 2004
Monitor	Hewlett Packard	D5258A	DK74889705	N/A	N/A
Loop Antenna	Com-Power	AL-130	17070	June 19, 2002	June 19, 2004
Horn Antenna	Antenna Research	DRG-118/A	1053	Jan. 13, 2002	Jan. 13, 2004
Horn Antenna	Com-Power	MWH-2640/B	1011	Nov. 3, 2001	Nov. 3, 2003
Microwave Preamplifier	Com-Power	PA-122	25196	Jan. 10, 2003	Jan. 10, 2004
Amplifier	Hewlett Packard	11975A	2403A00202	Mar. 14, 2002	Mar. 14, 2004
EMI Receiver	Rohde & Schwarz	ESIB40	100172	July 22, 2003	July 22, 2004
Harmonic Mixer	Hewlett Packard	11970K	3003A05460	Mar. 14, 2002	Mar. 14, 2004
Microwave Preamplifier	Com-Power	PA-840	711013	Mar. 6, 2002	Mar. 6, 2004
Horn Antenna	Com-Power	AH826	0071957	Nov. 3, 2001	Nov. 3, 2003

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(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

5.3 EMI Test Equipment for Agoura Facility

EQUIPMENT TYPE	MANU- FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
Radiated Emissions Manual Test – Radiated	Compatible Electronics	N/A	N/A	N/A	N/A
Conducted Emissions Test Program	Compatible Electronics	N/A	N/A	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	2729A04566	Jan. 27, 2003	Jan. 27, 2004
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A15161	Jan. 27, 2003	Jan. 27, 2004
Spectrum Analyzer – Quasi-Peak Adapter	Hewlett Packard	85650A	2521A00682	Jan. 27, 2003	Jan. 27, 2004
Preamplifier	Com Power	PA-102	01249	Feb. 10, 2003	Feb. 10, 2004
Biconical Antenna	Com Power	AB-100	01535	Mar. 10, 2003	Mar. 10, 2004
Log Periodic Antenna	Com Power	AL-100	01116	Jan. 23, 2003	Jan. 23, 2004
Computer	Hewlett Packard	Pavilion 4530	US91912022	N/A	N/A
Printer	Hewlett Packard	C6427B	MY066160TW	N/A	N/A
LISN	Com-Power	LI-215	02030	Oct. 19, 2003	Oct. 19, 2004
LISN	Com-Power	LI-215	12037	Oct. 19, 2003	Oct. 19, 2004
Transient Limiter	Com-Power	HZ560	Asset #: 3549	Jan. 24, 2003	Jan. 24, 2004

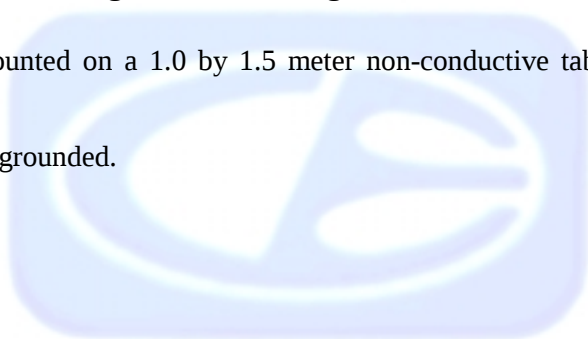
6. TEST SITE DESCRIPTION**6.1 Test Facility Description**

Please refer to section 2.1 and 8.1 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.



7. CHARACTERISTICS OF THE TRANSMITTER

7.1 Antenna Gain

The 802.11a antenna has a gain of 0 dBi.



8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

8.1 RF Emissions

8.1.1 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4: 2001. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

Test Results:

The EUT complies with the **Class A** limits EN 55022: 1998 for conducted emissions; and the limits of CFR Title 47, Part 15, Subpart E for conducted emissions.

8.1.2 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer was used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-102 was used for frequencies from 30 MHz to 1 GHz, the Com-Power Microwave Preamplifier Model: PA-122 was used for frequencies from 1 GHz to 18 GHz, and the Com Power Microwave Preamplifier Model: PA-840 was used for frequencies from 18 GHz to 40 GHz. The spectrum analyzer was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer records the highest measured reading over all the sweeps.

The quasi-peak adapter was used only for those readings which are marked accordingly on the data sheets.

The frequencies above 1 GHz were averaged manually by narrowing the video filter down to 10 Hz and putting the sweep time on AUTO on the spectrum analyzer to keep the amplitude reading calibrated.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 40 GHz	1 MHz	Horn Antenna

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4: 2001. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT by the Radiated Emission Manual Test software. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

Radiated Emissions (Spurious and Harmonics) Test (con't)

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3 meter test distance and also at a 10 meter test distance between 30 MHz and 1000 MHz.

For the 18 GHz – 26.5 GHz span, the Hewlett Packard 11970K Harmonic Mixer and the Hewlett Packard 11975A Amplifier were used to allow the spectrum analyzer to scan from 18 GHz to 26.5 GHz.

For the 26.5 GHz – 40 GHz span, the Hewlett Packard 11970A Harmonic Mixer and the Hewlett Packard 11975A Amplifier were used to allow the spectrum analyzer to scan from 26.5 GHz to 40 GHz.

8.2 Emission Bandwidth – 26 dB for UNII Devices

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 26 dB bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled.

Test Results:

The EUT complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.403 [c].

8.3 Peak Power for UNII Devices

The EUT is directly connected to the Spectrum Analyzer.

The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002.

The transmitter output operates continuously therefore Method #1 is used.

Test Results:

The EUT complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(1) and (a)(2).

8.4 Peak Power Spectral Density for UNII Devices

The EUT is directly connected to the Spectrum Analyzer.

The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002. PPSD method #2 was used.

Test Results:

The EUT complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(1) and (a)(2).

8.5 Peak Excursion for UNII Devices

The EUT was directly connected to the Spectrum Analyzer.

The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002. Since method #1 was used for the peak power measurements, method #1 is used for the second PPSD trace.

Test Results:

The EUT complies with the requirements of CFR Title 47, Part 15, Subpart E, section 15.407 (a)(1) and (a)(6).

8.6 RF Band Edges

The RF band edges were taken at the 5150 MHz and 5350 MHz. The readings taken were also averaged manually by narrowing the video filter down to 10 Hz and putting the sweep time on AUTO on the spectrum analyzer to keep the amplitude reading calibrated. Data sheets are included in Appendix E, which compares the reading from the spectrum analyzer to the spec limit.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart E. The RF power at the band edges at 5150 MHz and 5350 MHz meet the limits of section FCC Title 47, Part 15, Subpart C, Section 15.209. Please see the data sheets located in Appendix E.

9. CONCLUSIONS

The 802.11 a/b/g Wireless Access Point meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B and Subpart E.

Note: For the unintentional radiator portion of the test for conducted emissions and for radiated emissions from 30 MHz to 1000 MHz, the EUT was within the **Class A** specification limits defined by C.I.S.P.R. Publication 22 for Information Technology Equipment. Under paragraph E of section 15.107 and paragraph G of section 15.109 of the Code of Federal Regulations Title 47, Part 15 of the FCC rules, FCC accepts the international standards set forth in C.I.S.P.R. Publication 22.

Note: The 5.15 GHz to 5.25 GHz and 5.25 GHz to 5.35 GHz are applicable to this report; other bands of operation (2.4 and 5.8 GHz) are documented in the Compatible Electronics, Inc. report number **B30825D1**.

APPENDIX A

LABORATORY RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada

Radio-Frequency Technologies (Competent Body)

APPENDIX B

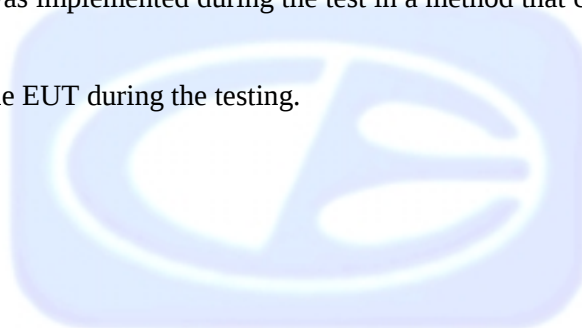
MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and Subpart E specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.



APPENDIX C

***ADDITIONAL MODELS COVERED
UNDER THIS REPORT***

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

802.11 a/b/g Wireless Access Point
Model: Access / One Network
S/N: N/A

There were no additional models covered under this report.



APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

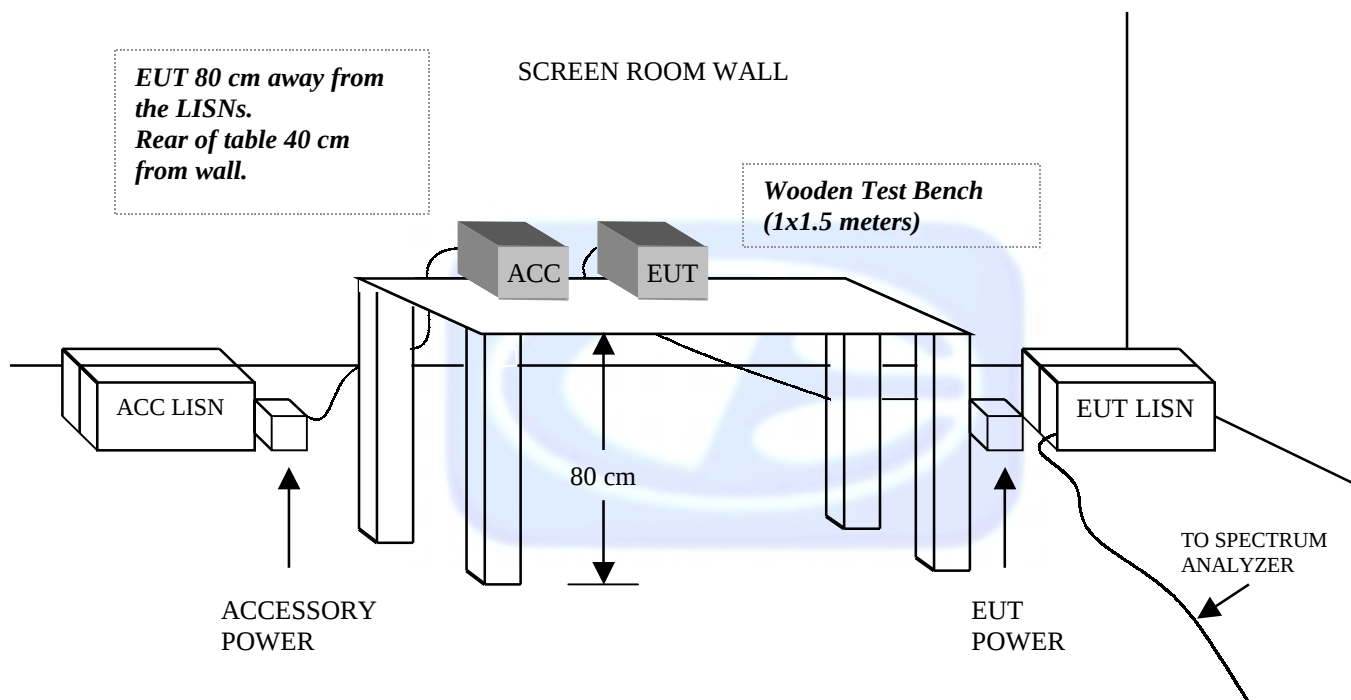
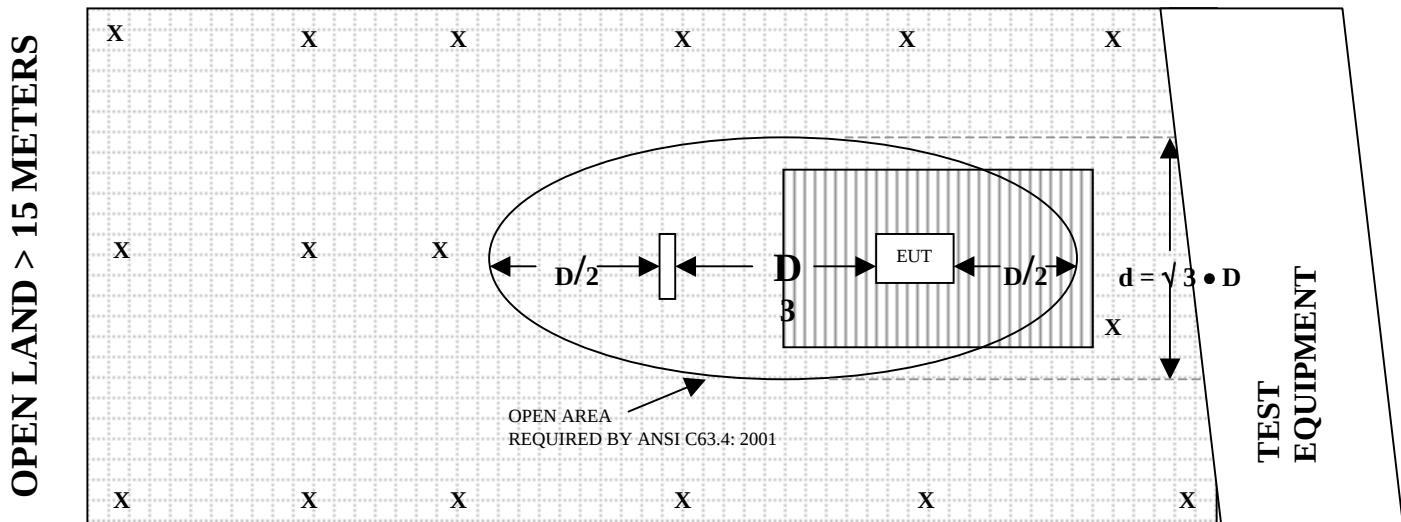


FIGURE 2: PLOT MAP AND LAYOUT OF 3 METER RADIATED SITE

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

X	= GROUND RODS		= GROUND SCREEN
D	= TEST DISTANCE (meters)		= WOOD COVER

COM-POWER AB-100

BICONICAL ANTENNA

S/N: 01548

CALIBRATION DATE: SEPTEMBER 19, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	14.30	120	10.70
35	14.00	125	11.40
40	13.70	140	12.70
45	12.00	150	12.50
50	11.40	160	12.90
60	9.70	175	14.10
70	8.30	180	14.70
80	7.60	200	15.10
90	7.80	250	16.90
100	8.60	300	19.10

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16089

CALIBRATION DATE: OCTOBER 4, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	13.10	700	17.70
350	14.40	750	19.60
400	14.30	800	20.50
450	15.70	850	21.20
500	16.60	900	21.20
550	16.60	950	22.50
600	17.30	1000	24.60
650	18.80		

COM-POWER PA-102**PREAMPLIFIER**

S/N: 1017

CALIBRATION DATE: JANUARY 2, 2003

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.4	300	38.3
40	38.4	350	38.3
50	38.3	400	38.3
60	38.4	450	37.9
70	38.4	500	38.1
80	38.4	550	38.2
90	38.4	600	38.1
100	38.3	650	37.9
125	38.4	700	37.9
150	38.4	750	37.7
175	38.2	800	37.4
200	38.4	850	37.6
225	38.2	900	37.4
250	38.3	950	36.7
275	38.5	1000	37.0

COM-POWER AB-100

BICONICAL ANTENNA

S/N: 01548

CALIBRATION DATE: SEPTEMBER 19, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	14.30	120	10.70
35	14.00	125	11.40
40	13.70	140	12.70
45	12.00	150	12.50
50	11.40	160	12.90
60	9.70	175	14.10
70	8.30	180	14.70
80	7.60	200	15.10
90	7.80	250	16.90
100	8.60	300	19.10

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16089

CALIBRATION DATE: OCTOBER 4, 2002

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	13.10	700	17.70
350	14.40	750	19.60
400	14.30	800	20.50
450	15.70	850	21.20
500	16.60	900	21.20
550	16.60	950	22.50
600	17.30	1000	24.60
650	18.80		

COM-POWER PA-102**PREAMPLIFIER**

S/N: 1017

CALIBRATION DATE: JANUARY 2, 2003

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.4	300	38.3
40	38.4	350	38.3
50	38.3	400	38.3
60	38.4	450	37.9
70	38.4	500	38.1
80	38.4	550	38.2
90	38.4	600	38.1
100	38.3	650	37.9
125	38.4	700	37.9
150	38.4	750	37.7
175	38.2	800	37.4
200	38.4	850	37.6
225	38.2	900	37.4
250	38.3	950	36.7
275	38.5	1000	37.0

COM-POWER PA-122

MICROWAVE PREAMPLIFIER

S/N: 25196

CALIBRATION DATE: JANUARY 10, 2003

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	32.3	6.0	27.9
1.1	32.6	6.5	28.9
1.2	32.4	7.0	29.2
1.3	32.1	7.5	29.3
1.4	31.8	8.0	29.4
1.5	31.7	8.5	28.5
1.6	31.6	9.0	28.7
1.7	31.6	9.5	27.9
1.8	31.0	10.0	27.0
1.9	32.0	11.0	26.9
2.0	31.0	12.0	28.7
2.5	30.5	13.0	28.6
3.0	30.5	14.0	28.7
3.5	30.0	15.0	27.1
4.0	30.0	16.0	26.1
4.5	29.9	17.0	26.0
5.0	29.7	18.0	23.9
5.5	30.2		

ANTENNA RESEARCH DRG-118/A**HORN ANTENNA**

S/N: 1053

CALIBRATION DATE: JANUARY 13, 2002

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	25.5	9.5	39.1
1.5	26.6	10.0	39.7
2.0	29.4	10.5	40.9
2.5	30.4	11.0	40.7
3.0	31.2	11.5	42.4
3.5	32.3	12.0	42.6
4.0	32.9	12.5	42.4
4.5	33.0	13.0	41.5
5.0	34.8	13.5	41.0
5.5	35.2	14.0	40.5
6.0	36.4	14.5	43.6
6.5	36.6	15.0	43.7
7.0	38.8	15.5	43.3
7.5	38.8	16.0	42.8
8.0	38.0	16.5	43.0
8.5	38.1	17.0	42.7
9.0	39.9	17.5	44.0
		18.0	41.8

COM-POWER AL-130**LOOP ANTENNA****S/N: 17070****CALIBRATION DATE: JUNE 19, 2002**

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-40.4	11.1
0.01	-40.3	11.2
0.02	-41.2	10.3
0.05	-41.6	9.9
0.07	-41.4	10.1
0.1	-41.7	9.8
0.2	-44.0	7.5
0.3	-41.6	9.9
0.5	-41.3	10.2
0.7	-41.4	10.1
1	-40.9	10.6
2	-40.6	10.9
3	-40.5	11.0
4	-40.8	10.7
5	-40.2	11.3
10	-40.7	10.8
15	-41.4	10.1
20	-41.6	9.9
25	-41.7	9.8
30	-42.9	8.6

COM-POWER AH826

HORN ANTENNA

S/N: 0071957

CALIBRATION DATE: NOVEMBER 03, 2001

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	32.3	22.5	32.5
18.5	32.2	23.0	32.1
19.0	32.3	23.5	32.3
19.5	31.9	24.0	32.3
20.0	32.0	24.5	32.9
20.5	32.3	25.0	33.1
21.0	32.0	25.5	32.9
21.5	32.3	26.0	33.4
22.0	32.5	26.5	33.0

COM-POWER MWH-2640/B

HORN ANTENNA

S/N: 1011

CALIBRATION DATE: NOVEMBER 03, 2001

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
26.5	35.7	33.5	36.7
27.0	35.4	34.0	36.4
27.5	35.7	34.5	36.8
28.0	35.9	35.0	36.4
28.5	35.8	35.5	36.6
29.0	35.7	36.0	36.7
29.5	35.9	36.5	37.1
30.0	36.1	37.0	37.0
30.5	36.5	37.5	37.2
31.0	36.6	38.0	37.2
31.5	36.3	38.5	37.7
32.0	36.5	39.0	38.0
32.5	36.6	39.5	37.9
33.0	36.8	40.0	38.2

COM-POWER PA-840**MICROWAVE PREAMPLIFIER****S/N: 711013****CALIBRATION DATE: MARCH 06, 2002**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	26.4	30.0	27.6
19.0	25.4	31.0	27.3
20.0	24.5	32.0	26.9
21.0	23.9	33.0	26.7
22.0	24.0	34.0	27.0
23.0	24.4	35.0	25.9
24.0	25.2	36.0	25.5
25.0	26.1	37.0	26.2
26.0	26.6	38.0	25.6
27.0	27.2	39.0	23.4
28.0	27.4	40.0	24.3
29.0	27.5		



FRONT VIEW

STRIX SYSTEMS, INC.
802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART B - RADIATED EMISSIONS – 07-16-03

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400



REAR VIEW

STRIX SYSTEMS, INC.
802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART B - RADIATED EMISSIONS – 07-16-03

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Lake Forest Division
20621 Pascal Way
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(949) 587-0400



FRONT VIEW

STRIX SYSTEMS, INC.
802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART B and E - RADIATED EMISSIONS – 07-22-03

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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(949) 589-0700

Lake Forest Division
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(949) 587-0400



REAR VIEW

STRIX SYSTEMS, INC.
802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART E - RADIATED EMISSIONS – 07-22-03

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
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FRONT VIEW

STRIX SYSTEMS, INC.
802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART B - CONDUCTED EMISSIONS – 07-17-03

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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REAR VIEW

STRIX SYSTEMS, INC.
802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART B - CONDUCTED EMISSIONS – 07-17-03

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

STRIX SYSTEMS, INC.
802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART E - CONDUCTED EMISSIONS – 08-12-03

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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REAR VIEW

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802.11 A/B/G WIRELESS ACCESS POINT
MODEL: Access / One Network
FCC SUBPART E - CONDUCTED EMISSIONS – 08-12-03

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