ADDENDUM TO ALICO SYSTEMS, INC. TEST REPORT

FOR THE

BROADBAND 802.11 B/G/A ACCESS POINT AND BRIDGE, 24-SB-07M, 24-LB-15O, 24-AE-19F AND 24-LB-20S

FCC PART 15 SUBPART C SECTIONS 15.207 & 15.247 AND SUBPART B SECTIONS 15.107 & 15.109 CLASS A

COMPLIANCE

DATE OF ISSUE: AUGUST 9, 2006

PREPARED FOR:

Alico Systems, Inc.
2461 W. 205th St., STE B105
Torrance, CA 90501

PREPARED BY:

Mary Ellen Clayton
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

P.O. No.: 15
W.O. No.: 84441

Date of test: January 18 - March 14, 2006

Report No.: FC06-009A

This report contains a total of 124 pages and may be reproduced in full only. Partial reproduction may only be done with the written consent of CKC Laboratories, Inc. The results in this report apply only to the items tested, as identified herein.

TABLE OF CONTENTS

Administrative Information 4
FCC to Canada Standard Correlation Matrix....5
Conditions for Compliance 6
Approvals....6
FCC 15.33(a) Frequency Ranges Tested 7
FCC 15.35 Analyzer Bandwidth Settings....7
FCC 15.203 Antenna Requirements 7
EUT Operating Frequency....7
Equipment Under Test (EUT) Description 8
Equipment Under Test 8
Peripheral Devices 10
Report of Measurements....11
Table 1: FCC 15.107 Six Highest Conducted Emission Levels 11
Table 2: FCC 15.109 Six Highest Radiated Emission Levels 12
Table 3: FC 15.207 Six Highest Conducted Emission Levels....13
Table 4: FCC 15.247(d) Six Highest Radiated Emission Levels....14
FCC Part 15.247(b)(3) RF Power 15
FCC Part 15.247(d) Bandedge....28
Temperature And Humidity During Testing....36
EUT Setup....36
Correction Factors....36
Table A: Sample Calculations 36
Test Instrumentation and Analyzer Settings 37
Spectrum Analyzer Detector Functions 37
Peak....37
Quasi-Peak 37
Average 37
EUT Testing....38
Mains Conducted Emissions....38
Antenna Conducted Emissions 38
Radiated Emissions....38
Appendix A: Test Setup Photographs....39
Photograph Showing Mains Conducted Emissions 40
Photograph Showing Mains Conducted Emissions 41
Photograph Showing Mains Conducted Emissions 42
Photograph Showing Mains Conducted Emissions 43
Photograph Showing Mains Conducted Emissions 44
Photograph Showing Mains Conducted Emissions 45
Photograph Showing Radiated Emissions 46
Photograph Showing Radiated Emissions 47
Photograph Showing Radiated Emissions 48
Photograph Showing Radiated Emissions 49

Photograph Showing Radiated Emissions 50
Photograph Showing Radiated Emissions 51
Photograph Showing Radiated Emissions 52
Photograph Showing Radiated Emissions 53
Photograph Showing Radiated Emissions 54
Photograph Showing Radiated Emissions 55
Photograph Showing Radiated Emissions 56
Photograph Showing Radiated Emissions 57
Photograph Showing Radiated Emissions 58
Photograph Showing Radiated Emissions 59
Photograph Showing Direct Connect Test Setup.....60
Photograph Showing Direct Connect Test Setup.....61
Appendix B: Test Equipment List 62
Appendix C: Measurement Data Sheets 64

ADMINISTRATIVE INFORMATION

DATE OF TEST:	January 18 - March 14, 2006
DATE OF RECEIPT:	January 18, 2006
MANUFACTURER:	Alico Systems, Inc. 2461 W. 205th St., STE B105 Torrance, CA 90501
REPRESENTATIVE:	Syed Akbar
TEST LOCATION:	CKC Laboratories, Inc. 110 Olinda Place Brea, CA 92823
TEST METHOD:	FCC Part 15 Subpart C Sections 15.207 & 15.247 and Subpart B Sections 15.107 & 15.109
PURPOSE OF TEST:	To demonstrate the compliance of the Broadband 802.11 B/G/A Access Point and Bridge, 24-SB-07M, 24-LB-15O, 24-AE-19F and 24-LB-20S, with the requirements for FCC Part 15 Subpart C Sections 15.207 & 15.247 and Subpart B Sections 15.107 & 15.109 Class A devices. **Addendum A** is to add additional information regarding the power output for each antenna used with no new testing.

FCC TO CANADA STANDARD CORRELATION MATRIX

Canadian Standard	Canadian Section	FCC Standard	FCC Section	Test Description
RSS GEN	7.1.4	47CFR	15.203	Antenna Connector Requirements
RSS GEN	7.2.1	47CFR	15.35(c)	Pulsed Operation
RSS GEN	7.2.2	47CFR	15.207	AC Mains Conducted Emissions Requirement
RSS 210	2.1	47CFR	15.215(c)	Frequency Stability Recommendation
RSS 210	2.2	47CFR	15.205	Restricted Bands of Operation
RSS 210	2.6	47CFR	15.209	General Radiated Emissions Requirement
RSS 210	A8.1	47CFR	15.247(a)(1)	Definition of FHSS
RSS 210	A8.1	47CFR	15.247(h)	Incorporation of Intelligence
RSS 210	A8.1(1)	47CFR	15.247(a)(1)	Minimum Channel Bandwidth
RSS 210	A8.1(1)	47CFR	15.247(g)	Hopping Sequence
RSS 210	A8.1(2)	47CFR	15.247(a)(1)	Carrier Separation
RSS 210	A8.1(2)	47CFR	15.247(a)(1)	Carrier Separation 2400 Alternative
RSS 210	A8.1(3)	47CFR	15.247(a)(1)(i)	Carrier Separation
RSS 210	A8.1(3)	47CFR	15.247(a)(1)(i)	Average Time of Occupancy
RSS 210	A8.1(3)	47CFR	15.247(a)(1)(i)	Number of Hopping Channels
RSS 210	A8.1(4)	47CFR	15.247(a)(1)(iii)	Average Time of Occupancy
RSS 210	A8.1(4)	47CFR	15.247(a)(1)(iii)	Number of Hopping Channels
RSS 210	A8.1(5)	47CFR	15.247(a)(1)(ii)	Max 20dB Bandwidth
RSS 210	A8.1(5)	47CFR	15.247(a)(1)(ii)	Average Time of Occupancy
RSS 210	A8.1(5)	47CFR	15.247(a)(1)(ii)	Number of Hopping Channels
RSS 210	A8.2(1)	47CFR	15.247(a)(2)	Minimum 6dB Bandwidth
RSS 210	A8.2(2)	47CFR	15.247(e)	Peak Power Spectral Density
RSS 210	A8.3(1)	47CFR	15.247(f)	Hybrid Systems - Time of Occupancy
RSS 210	A8.3(1)	47CFR	15.247(f)	Hybrid Systems - Power Spectral Density
RSS 210	A8.4(1)	47CFR	15.247(b)(2)	RF Power Output
RSS 210	A8.4(2)	47CFR	15.247(b)(1)	RF Power Output
RSS 210	A8.4(3)	47CFR	15.247(b)(1)	RF Power Output
RSS 210	A8.4(4)	47CFR	15.247(b)(3)	RF Power Output
RSS 210	A8.4(5)	47CFR	15.247(c)(1)	Directional Gain Requirements
RSS 210	A8.4(6)	47CFR	15.247(c)(2)	Beam Steering Antennas
RSS 210	A8.5	47CFR	15.247(d)	Spurious Emissions
	IC 3172-A		90473	Site File No.

Notes: Rule Sections for RSS 210 are taken from RSS 210 Issue 6

CONDITIONS FOR COMPLIANCE

Modifications

WNE-2407M: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure.
WNE-2419F Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.
WNE-2420S Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.
WNE-2415OBandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:	**TEST PERSONNEL:**
Joyce Walker, Quality Assurance Administrative Manager	Eddie Wong, EMC Engineer

FCC 15.33(a) Frequency Ranges Tested
15.107 Conducted Emissions: 150 kHz – 30 MHz
15.109 Radiated Emissions: 30 MHz – 1000 MHz
15.207 Conducted Emissions: 150 kHz – 30 MHz
15.247 Radiated Emissions: 30 MHz – 25 GHz

FCC SECTION 15.35: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	25 GHz	1 MHz

FCC 15.203 Antenna Requirements
The antenna is a removable but must be professionally installed; therefore the EUTF complies with Section 15.203 of the FCC rules.

EUT Operating Frequency
The EUT was operating at 2412 MHz – 2462 MHz.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

The following models were tested by CKC Laboratories (see table below):

Since the time of testing the manufacturer has chosen to use the following model names in their place. Any differences between the names does not affect their EMC characteristics and therefore complies to the level of testing equivalent to the tested model name shown on the data sheets:

Original Model Designation	New Model Designation	Comment
WNE-2407M	24-SB-07M	2.4 GHz Small Box 7 dBi Mobile Omni
WNE-2415O	24-LB-15O	2.4 GHz Large Box 15 dBi Omni
WNE-2419F	24-AE-19F	2.4 GHz Antenna Enclosure 19 dBi Flat Panel
WNE-2420S	24-LB-20S	2.4 GHz Large Box 20 dBi Sector

EQUIPMENT UNDER TEST

Module 24-SB-07M consists of:

Radio Card
Manuf: Ubiquiti Networks
Model: Super Range 2
Serial: NA

Router Board
Manuf: Mikrotik
Model: RB/532
Serial: NA

Power Supply
Manuf: AULT Inc
Model: PW118
Serial: NA

Antenna
Manuf: Pacific Wireless
Model: MA24-7
Serial: NA

Passive POE Injector
Manuf: HyperLink Technologies
Model: BT-CAT5-P1
Serial: NA

Module 24-AE-19F consists of:

Radio Card
Manuf: Ubiquiti Networks
Model: Super Range 2
Serial: NA

Router Board
Manuf: Mikrotik
Model: RB/532
Serial: NA

Power Supply
Manuf: AULT Inc
Model: PW118
Serial: NA

Antenna
Manuf: Pacific Wireless
Model: MT-345013
Serial: NA

Passive POE Injector
Manuf: HyperLink Technologies
Model: BT-CAT5-P1
Serial: NA

Module 24-LB-20S consists of:

Radio Card
Manuf: Ubiquiti Networks
Model: Super Range 2
Serial: NA

Router Board
Manuf: Mikrotik
Model: RB/532
Serial: NA

Power Supply
Manuf: AULT Inc
Model: PW118
Serial: NA

Antenna
Manuf: HyperLink Technologies
Model: HG2420P-120
Serial: NA

Passive POE Injector
Manuf: HyperLink Technologies
Model: BT-CAT5-P1
Serial: NA

Module 24-LB-15O consists of:

Radio Card

Manuf:	Ubiquiti Networks
Model:	Super Range 2
Serial:	NA

Antenna

Manuf:	HyperLink Technologies
Model:	HG2415U-PRO
Serial:	NA

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Laptop

Manuf:	Dell
Model:	Inspiron 600M
Serial:	GH1TU71

Power Supply

Manuf:	Cincon
Model:	TR25120
Serial:	NA

Router Board

Manuf:	PC Engine
Model:	WRAP 2C
Serial:	NA

REPORT OF MEASUREMENTS

The following tables report the six highest worst case levels recorded during the tests performed on the EUT. All readings taken are peak readings unless otherwise noted. The data sheets from which these tables were compiled are contained in Appendix C.

Table 1: FCC 15.107 Six Highest Conducted Emission Levels

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS HPF dB	Att dB	Cable dB	Lisn dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES
2.233823	47.7	0.1	5.8	0.1	0.0	53.7	60.0	-6.3	W-F
2.238076	47.8	0.1	5.8	0.2	0.1	54.0	60.0	-6.0	W-S
2.301867	47.9	0.1	5.8	0.2	0.1	54.1	60.0	-5.9	W-F
2.301867	47.6	0.1	5.8	0.2	0.1	53.8	60.0	-6.2	W-S
2.369910	47.8	0.1	5.8	0.2	0.1	54.0	60.0	-6.0	W-F
2.369910	47.5	0.1	5.8	0.2	0.1	53.7	60.0	-6.3	W-S

Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart B Section 15.107 Class A

NOTES: W = White Lead
M = 24-SB-07M
F = 24-AE-19F
S = 24-LB-20S

COMMENTS: See individual data sheets for test conditions.

Table 2: FCC 15.109 Six Highest Radiated Emission Levels									
FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	Amp dB	Cable dB	Dist dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN dB	NOTES
36.150	58.4	14.9	-27.7	1.1	-10.0	36.7	39.1	-2.4	VQ-S
37.891	57.6	14.0	-27.7	1.2	-10.0	35.1	39.1	-4.0	V-S
42.026	59.6	11.8	-27.7	1.2	-10.0	34.9	39.1	-4.2	V-S
49.879	64.0	7.8	-27.7	1.3	-10.0	35.4	39.1	-3.7	V-M
50.450	65.9	7.6	-27.7	1.3	-10.0	37.1	39.1	-2.0	V-F
77.245	66.1	6.7	-27.7	1.7	-10.0	36.8	39.1	-2.3	VQ-F

Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart B Section 15.109 Class A
Test Distance: 3 Meters

NOTES:
Q = Quasi Peak Reading
V = Vertical Polarization
M = 24-SB-07M
F = 24-AE-19F
S = 24-LB-20S

COMMENTS: See individual data sheets for test conditions.

Table 3: FC 15.207 Six Highest Conducted Emission Levels									
	METER	CORRECTION FACTORS				CORRECTED	SPEC		
FREQUENCY MHz	READING dBµV	HPF dB	Att dB	Cable dB	Lisn dB	READING dBµV	LIMIT dBµV	MARGIN dB	NOTES
2.301867	38.5	0.1	5.8	0.2	0.1	44.7	46.0	-1.3	B-F
2.433701	39.4	0.1	5.8	0.2	0.1	45.6	46.0	-0.4	WA-S
2.433701	39.3	0.1	5.8	0.2	0.1	45.5	46.0	-0.5	WA-F
2.497492	39.5	0.1	5.8	0.2	0.1	45.7	46.0	-0.3	WA-M
2.563783	39.1	0.1	5.8	0.2	0.1	45.3	46.0	-0.7	WA-M
2.693117	38.6	0.1	5.8	0.2	0.1	44.8	46.0	-1.2	W-M

Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart C Section 15.207

NOTES:
A = Average Reading
B = Black Lead
W = White Lead
M = 24-SB-07M
F = 24-AE-19F
S = 24-LB-20S

COMMENTS: See individual data sheets for test conditions.

Table 4: FCC 15.247(d) Six Highest Radiated Emission Levels									
FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	Amp dB	Cable dB	HPF dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN dB	NOTES
4874.000	45.2	31.9	-37.9	6.4	0.6	46.2	54.0	-7.8	H-M
7229.420	45.6	34.3	-37.4	7.7	0.0	50.2	54.0	-3.8	V-O
7234.500	40.9	34.3	-37.4	7.7	0.0	45.5	54.0	-8.5	V-O
7315.000	39.9	34.5	-37.4	7.8	1.4	46.2	54.0	-7.8	VA-O
7317.500	40.7	34.5	-37.4	7.8	1.4	47.0	54.0	-7.0	HA-M
7320.500	40.0	34.5	-37.4	7.8	1.4	46.3	54.0	-7.7	VA-M

Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart C Section 15.247(d)
Test Distance: 3 Meters

NOTES:
H = Horizontal Polarization
V = Vertical Polarization
A = Average Reading
O = 24-LB-15O
M = 24-SB-07M
F = 24-AE-19F
S = 24-LB-20S

COMMENTS: See individual data sheets for test conditions.

FCC Part 15.247(b)(3) RF POWER

Conducted Peak power is measured with a Spectrum analyzer.

Peak detector selected.
RBW= 1 MHz
VBW = 3 MHz
Integration over 18 MHz.

802-11G

Model Number	Config	Transmit Range	Antenna	Conducted power (dBm)		
				L	M	H
24-AE-19F	A1	2.4GHz	19dBi Flat Panel	20.3	20.8	20.2
24-LB-20S	A2	2.4GHz	20dBi Sector	20.9	21.0	21.7
24-LB-15O	A3	2.4GHz	15dBi Omni	20.2	20.8	20.6
24-SB-07M	A5	2.4GHz	7dBi Omni	21.1	21.9	21.7

Note Band Pass filter: Anatech Microwave MN: AB1694 SN 05 installed in 2.4 GHz, 19 dBi, 20 dBi and 15 dBi Configurations.

dBi Gain	Antenna	Type	Range	Output Power (mW)	Worst Case Output (dBm)	Output Power Limit	Pass / Fail	Gain >6dBi	Calculated EIRP
19.0	Flat Panel	Directional	2.4GHz	706	20.8	25.7	Pass	13.0	39.8
17.0	Sector	Directional	2.4GHz	706	21.7	26.3	Pass	11.0	38.7
12.0	Omni	Omni	2.4GHz	706	20.8	24.0	Pass	6.0	32.8
7.0	Omni	Omni	2.4GHz	706	21.9	29.0	Pass	1.0	28.9

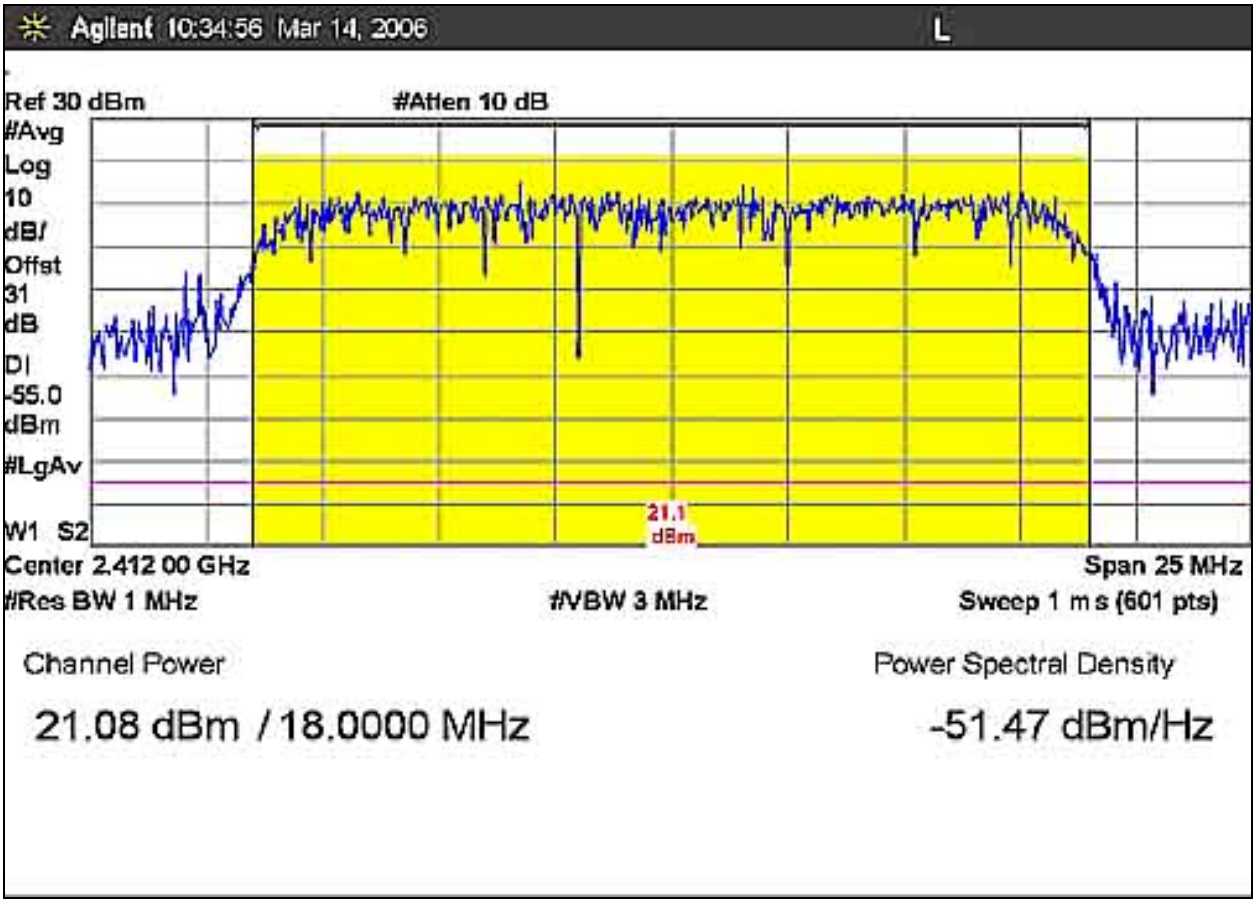
These are the calculations to "derive" the Output Power limit.

Gain>6 dBi = Antenna gain - 6

For Omni antenna 2.4
Output power limit = 30dBm -(gain>6)

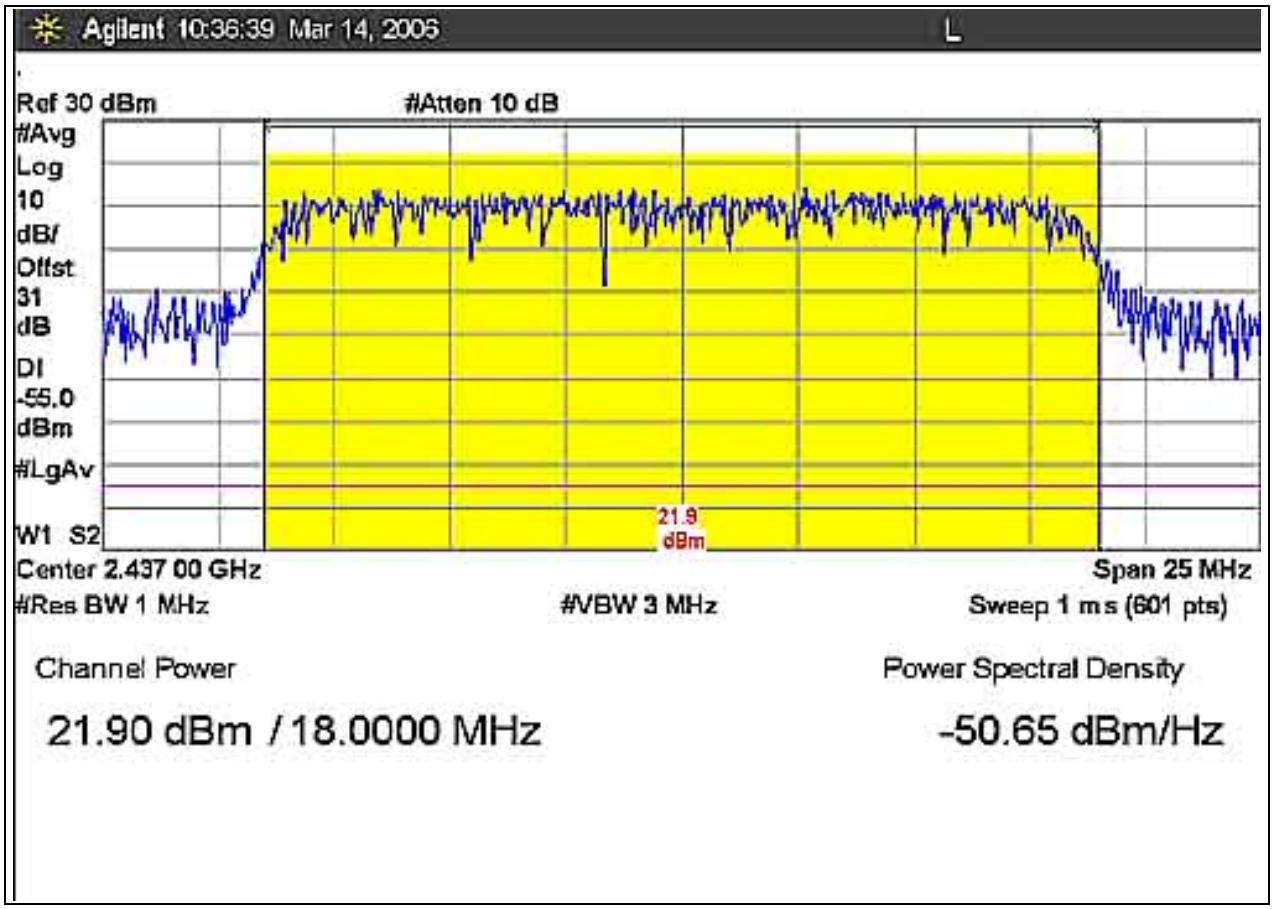
Directional antenna 2.4 GHz
Output power limit = 30 dBm - (gain>6) /3

FCC 15.247(b)(3) RF POWER OUTPUT- 24-SB-07M 2412MHz



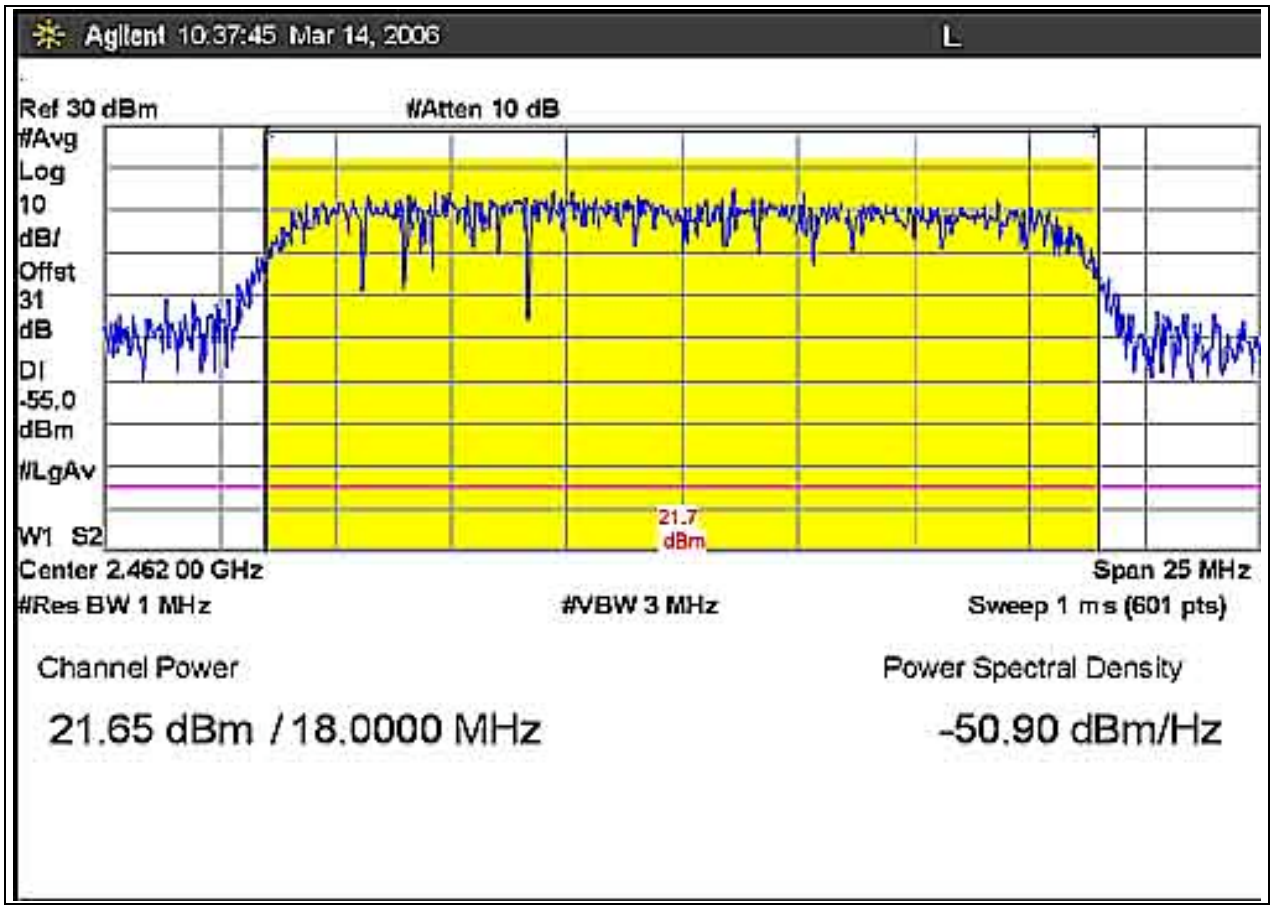
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-SB-07M 2437 MHz



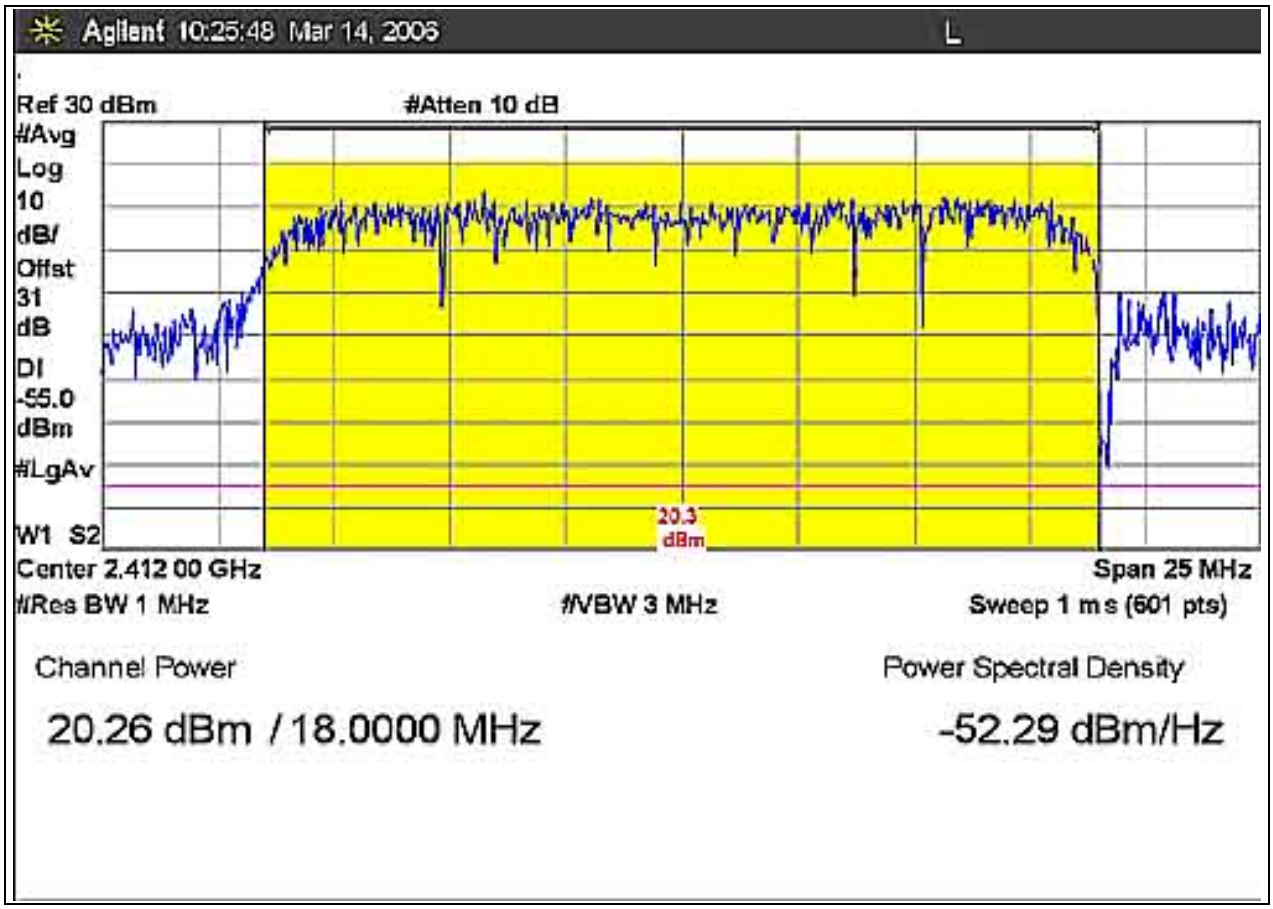
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-SB-07M 2462 MHz



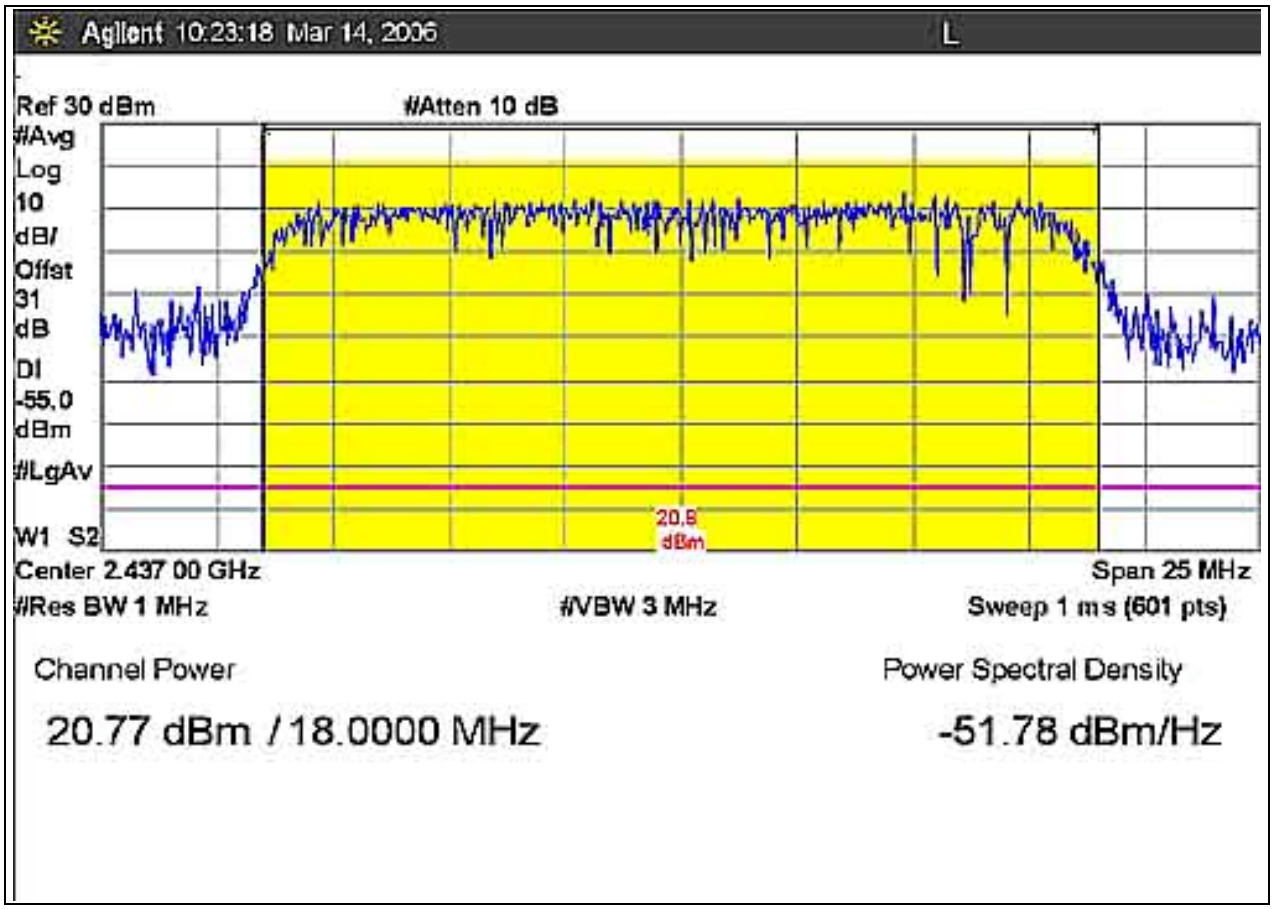
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-AE-19F 2412 MHz



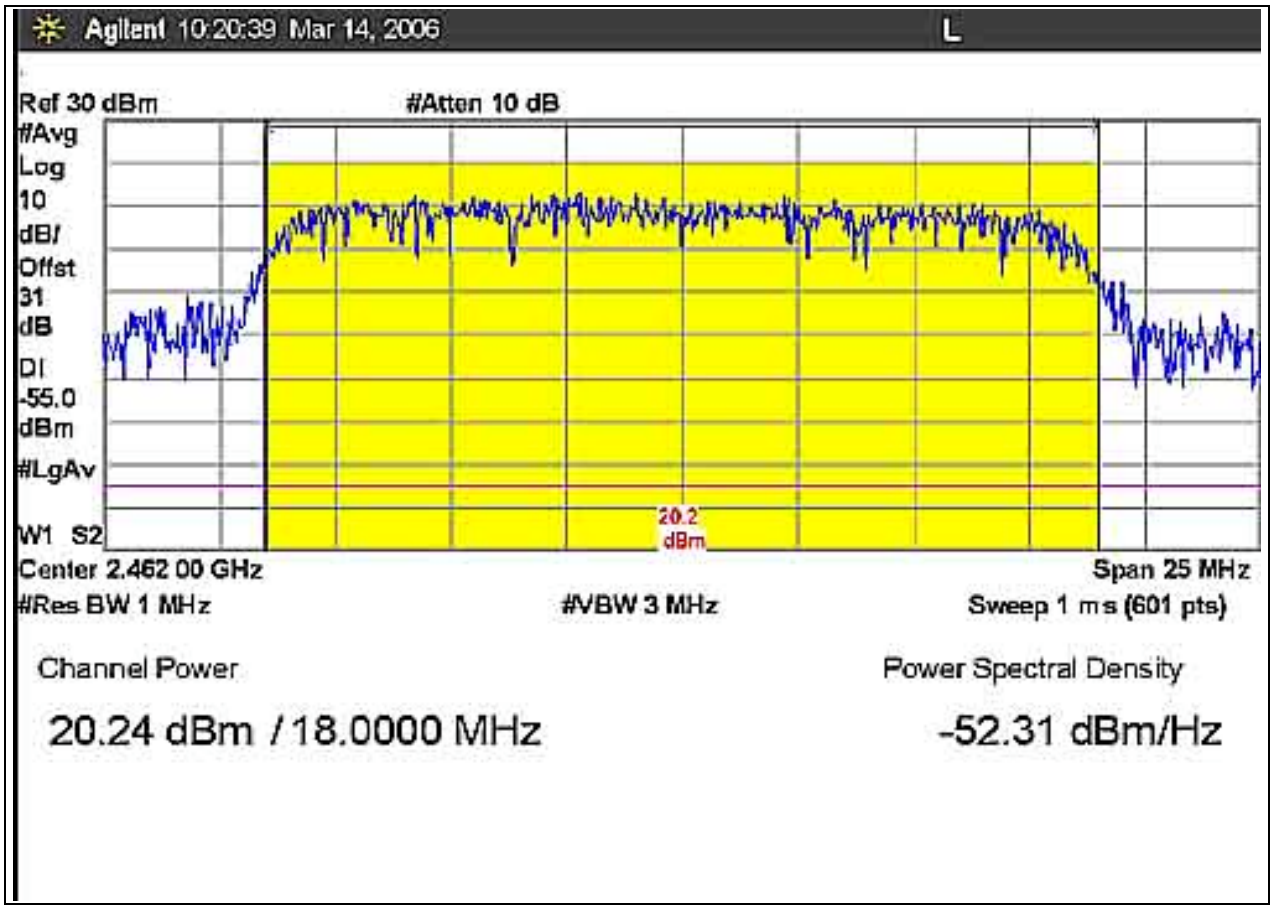
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-AE-19F 2437 MHz



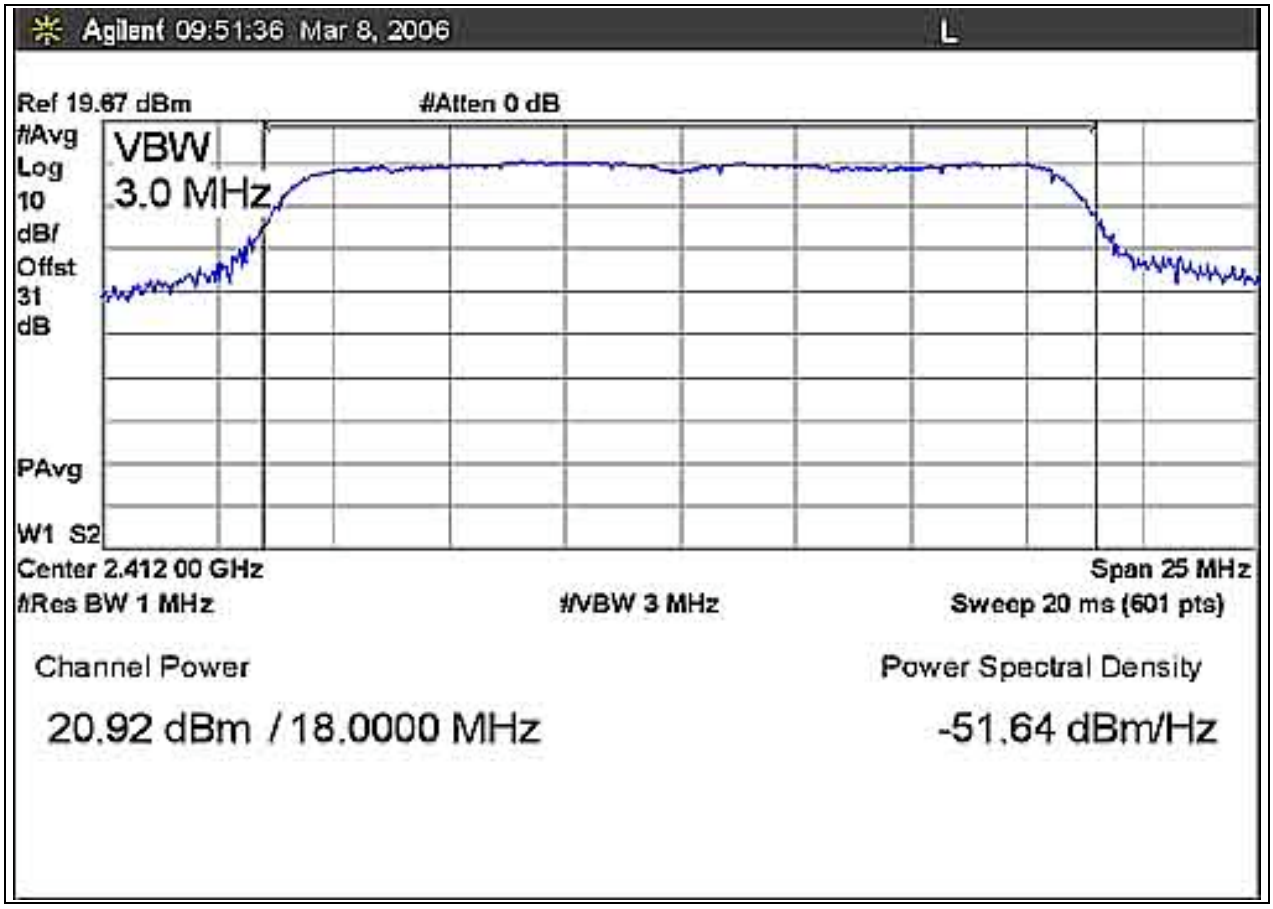
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-AE-19F 2462 MHz



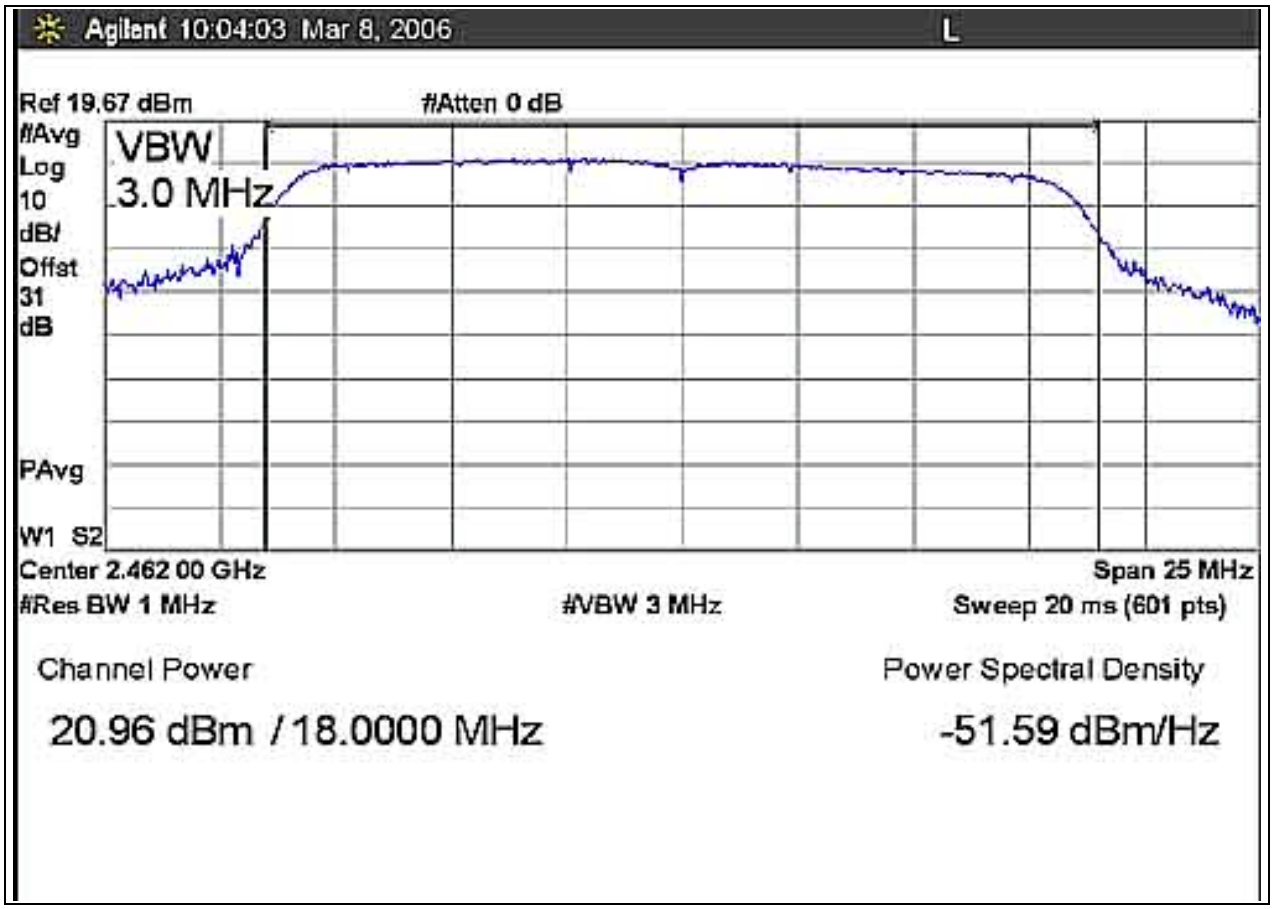
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-LB-20S 2412 MHz



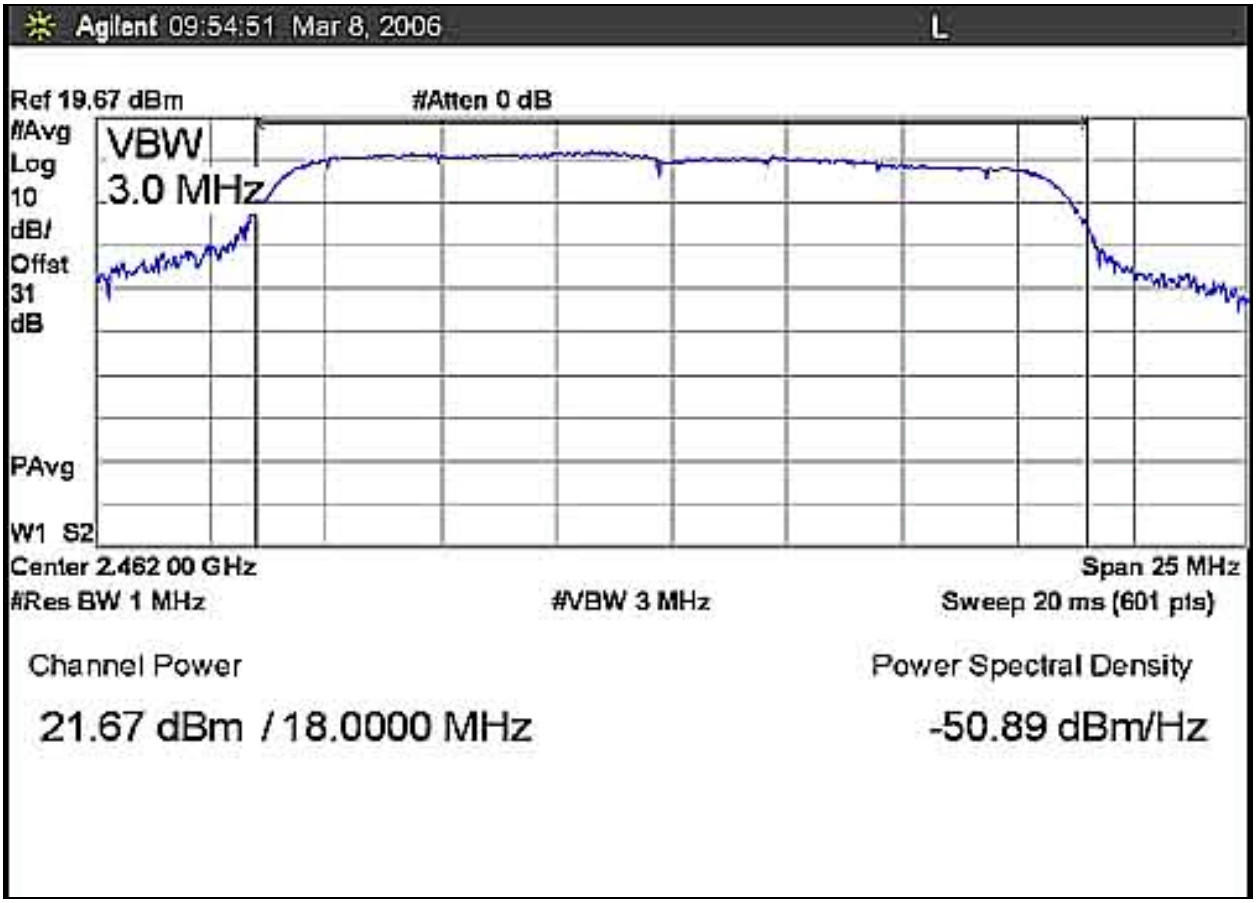
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-LB-20S 2437 MHz



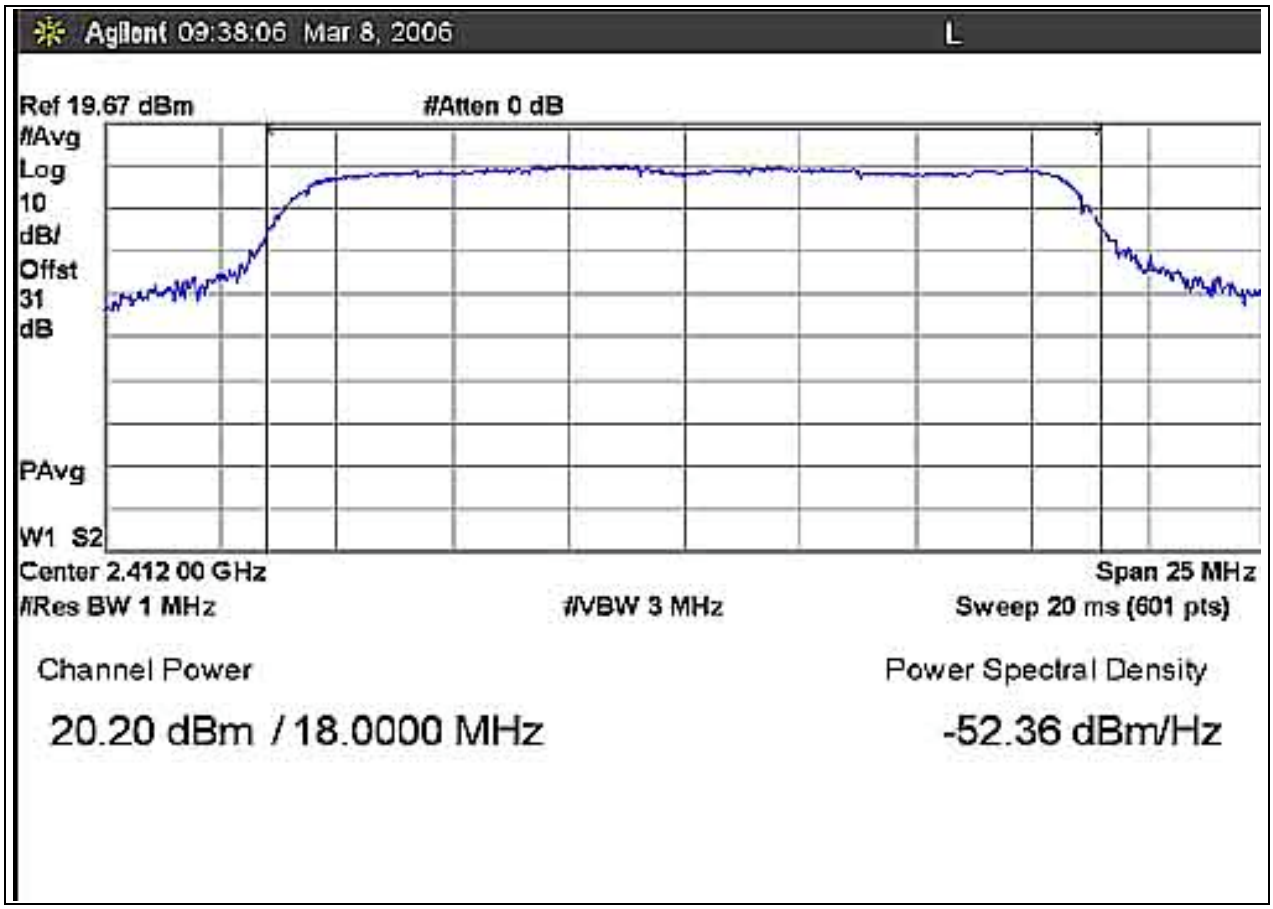
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-LB-20S 2462 MHz



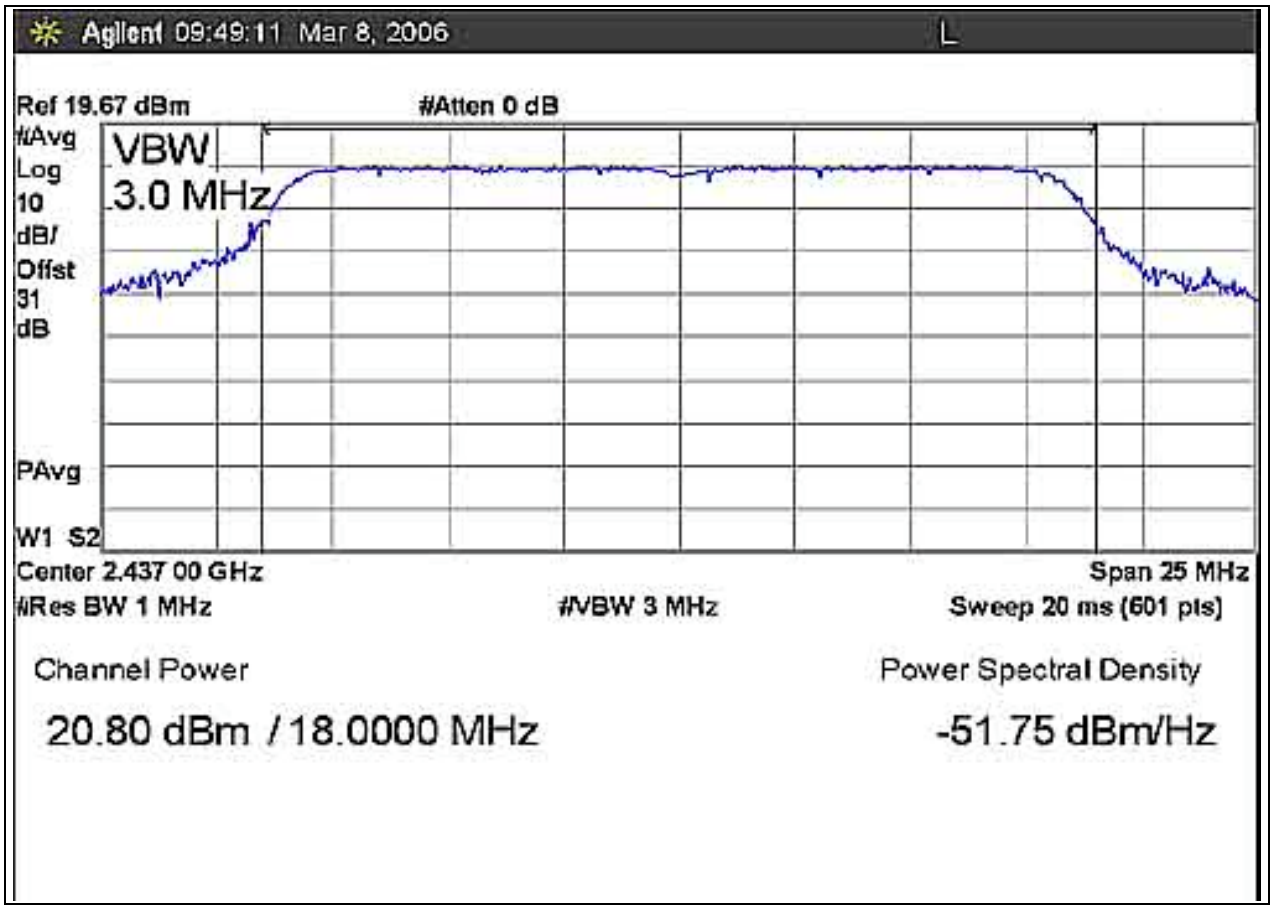
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-LB-15O 2412 MHz



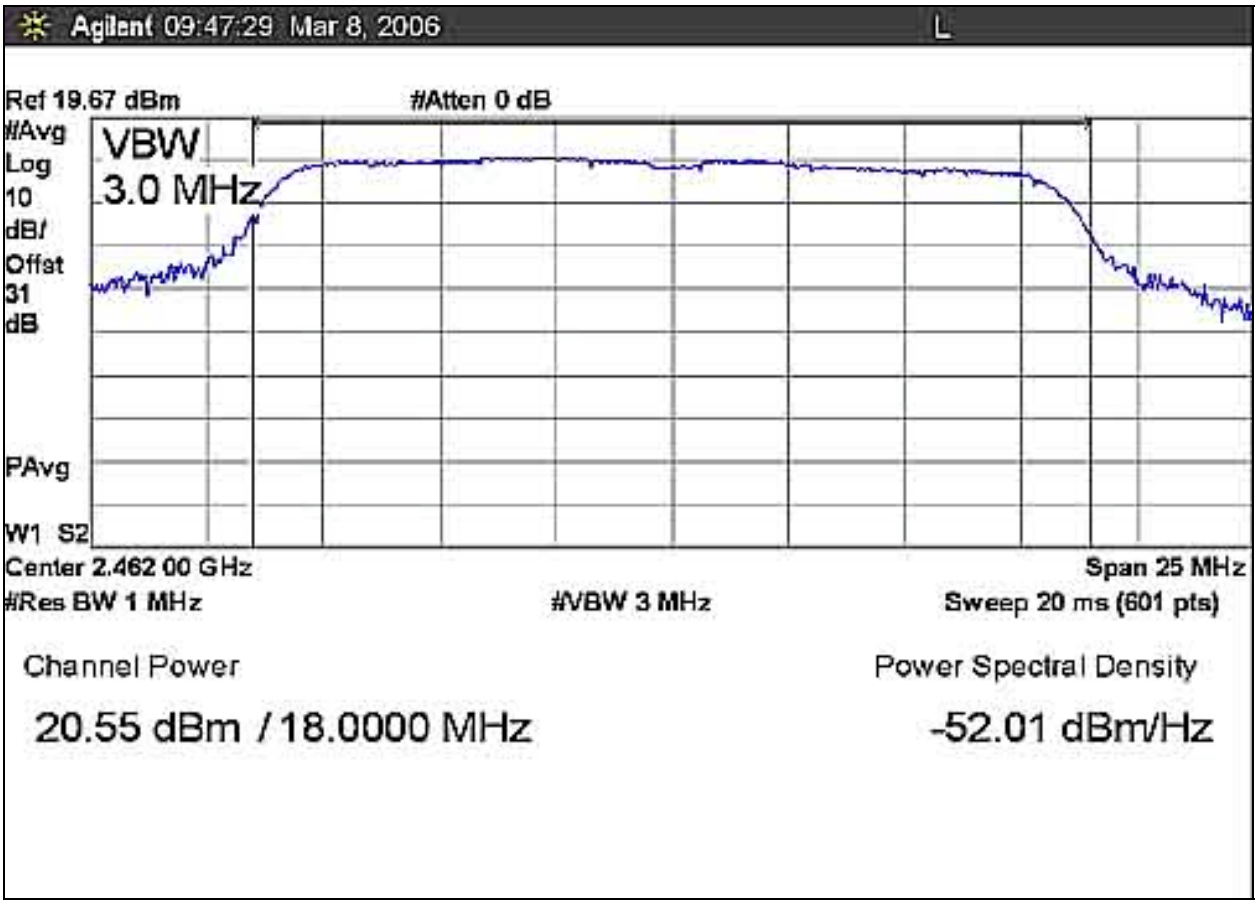
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(b)(3) RF POWER OUTPUT- 24-LB-15O 2437 MHz



The 18.000 MHz number comes from the previous modular testing.

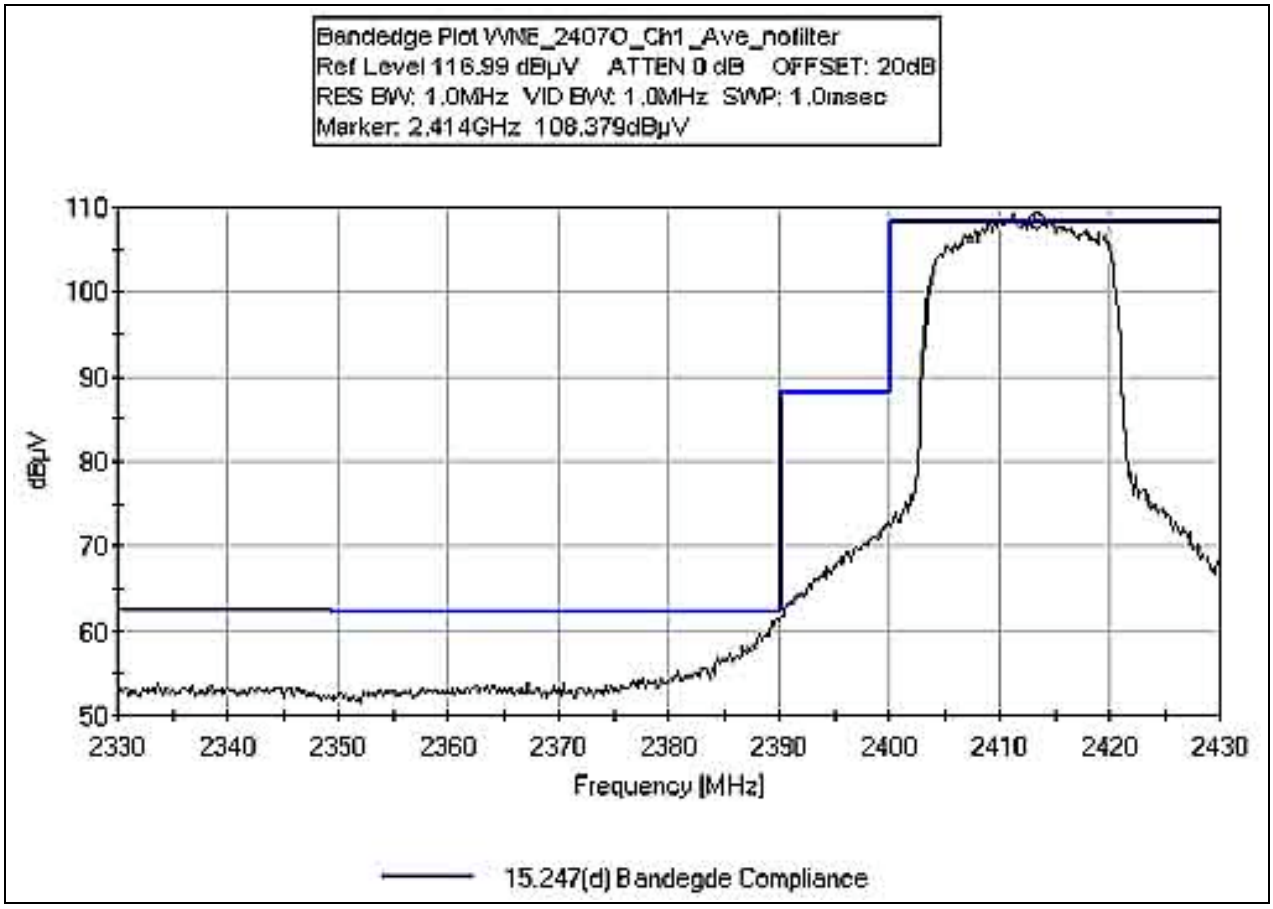
FCC 15.247(b)(3) RF POWER OUTPUT- 24-LB-15O 2462 MHz



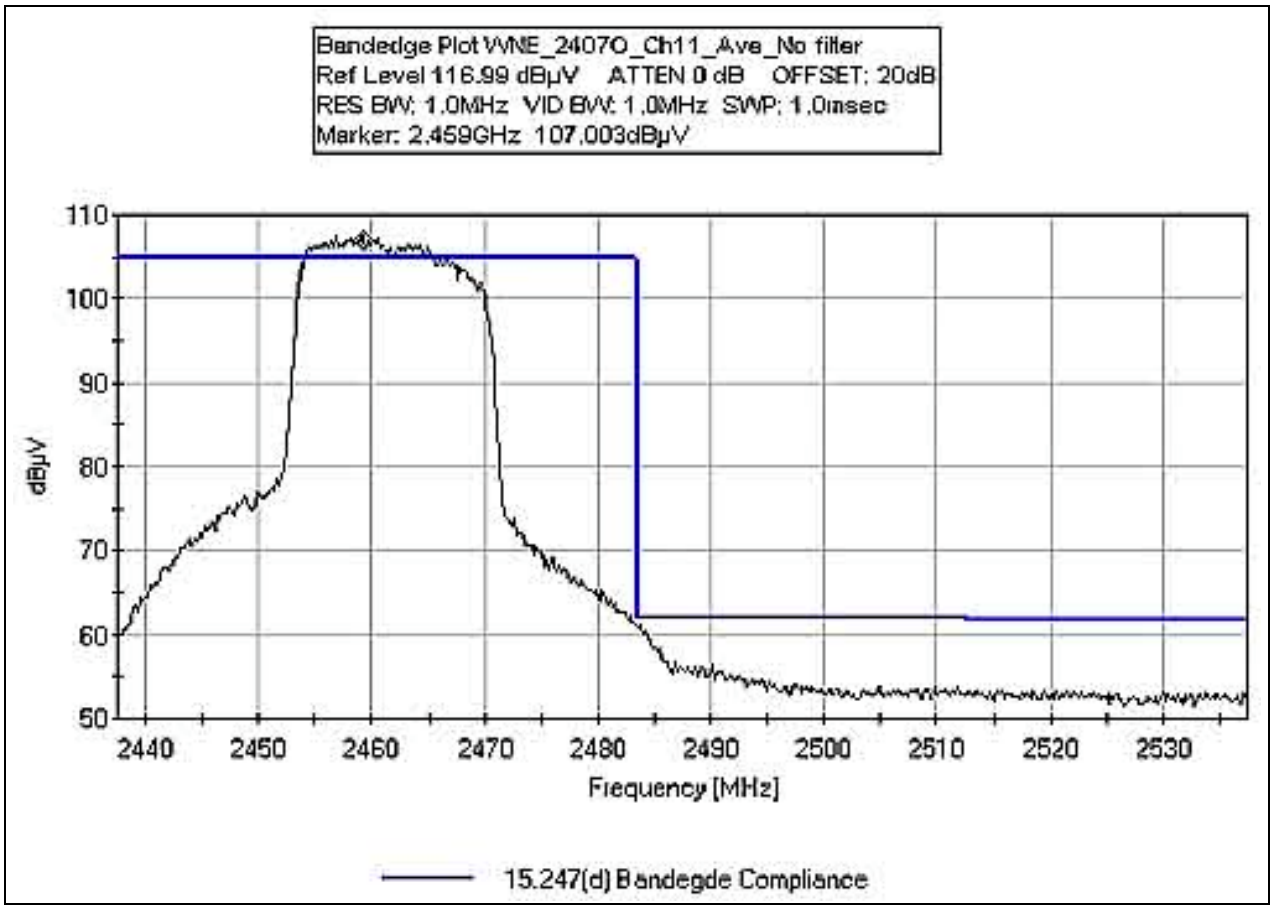
The 18.000 MHz number comes from the previous modular testing.

FCC 15.247(d) BANDEDGE - 24-SB-07M CHANNEL 1

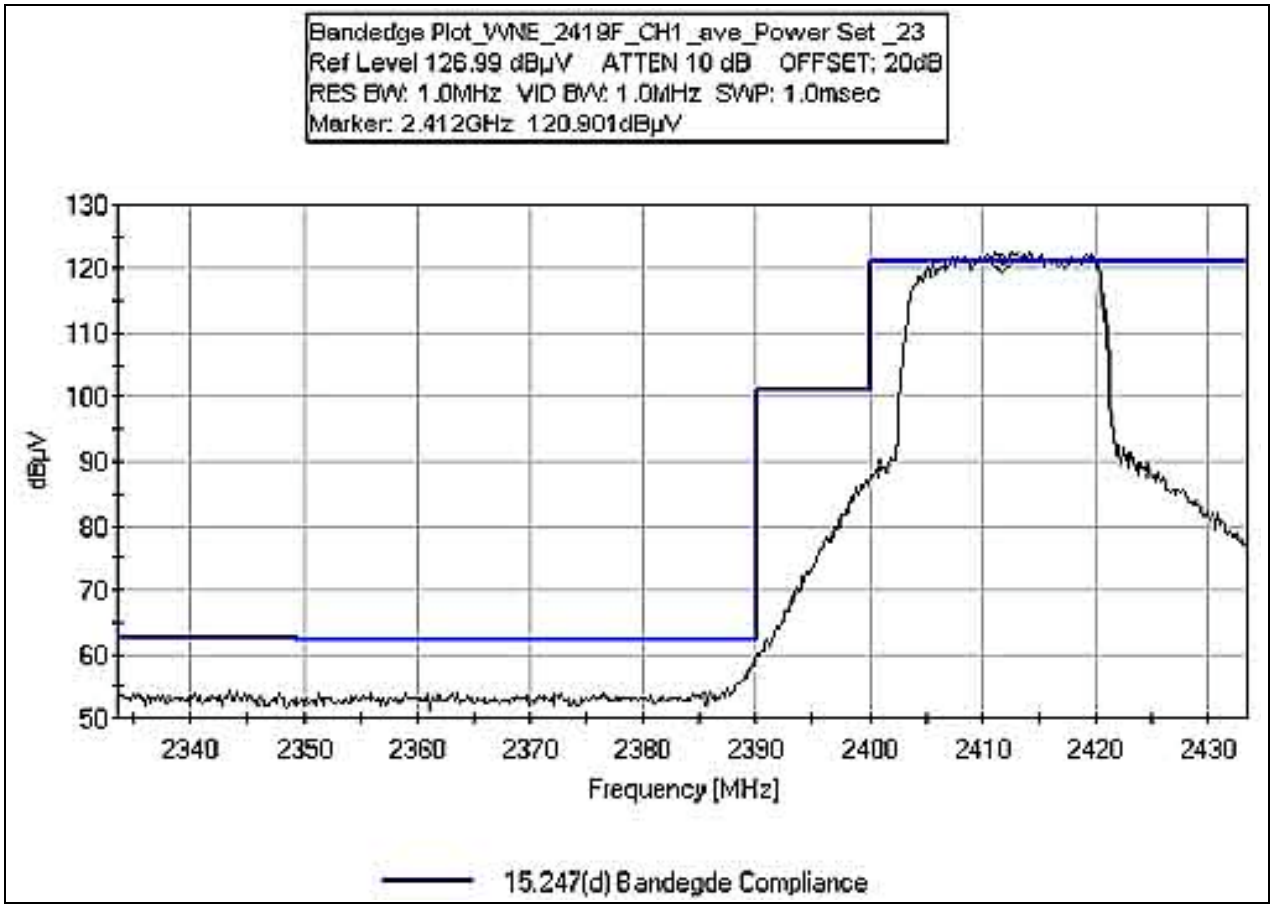
Test Conditions: Radiated field strength, Bandedge plots are performed on Open Area test site, 3 meter test distance.



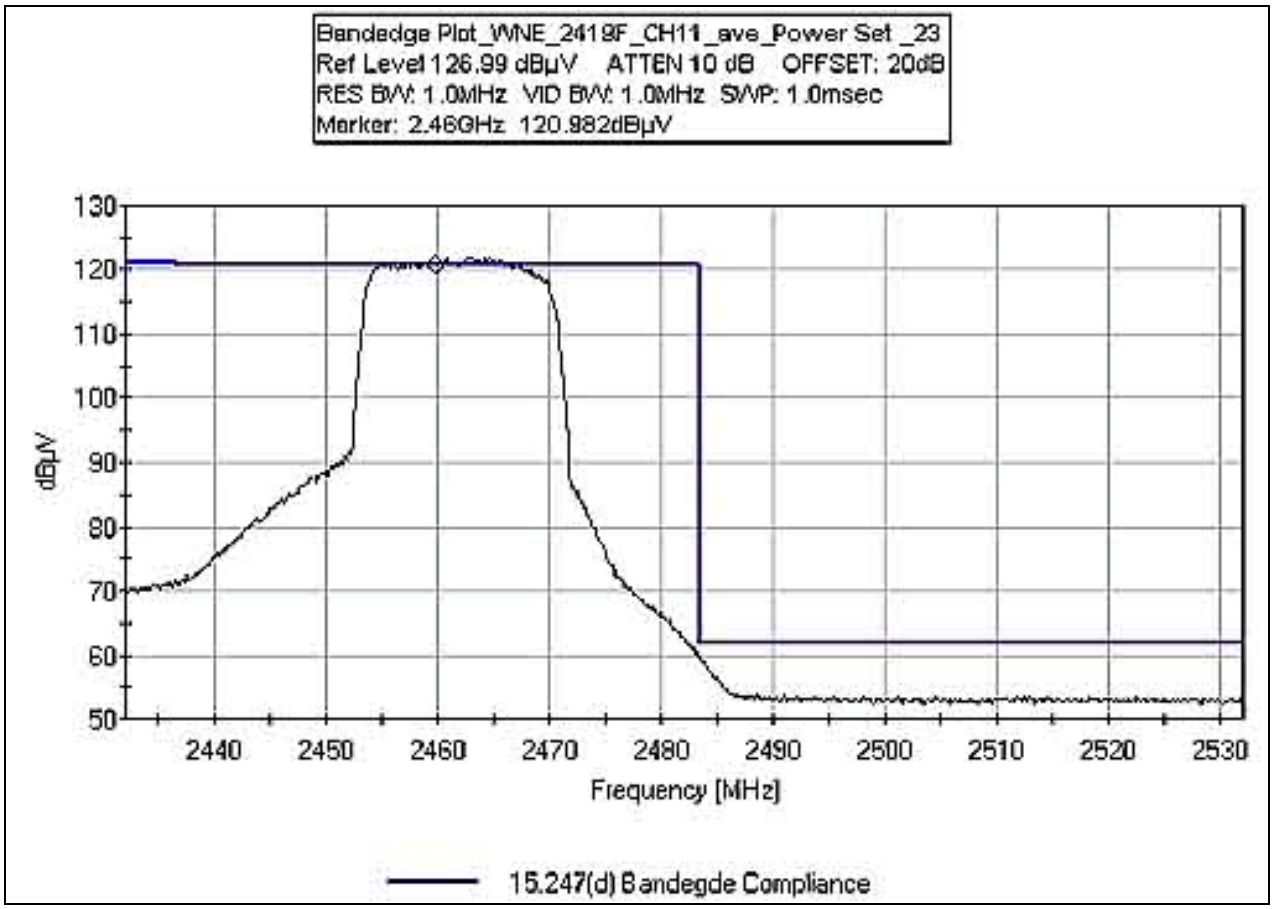
FCC 15.247(d) BANDEDGE - 24-SB-07M CHANNEL 11



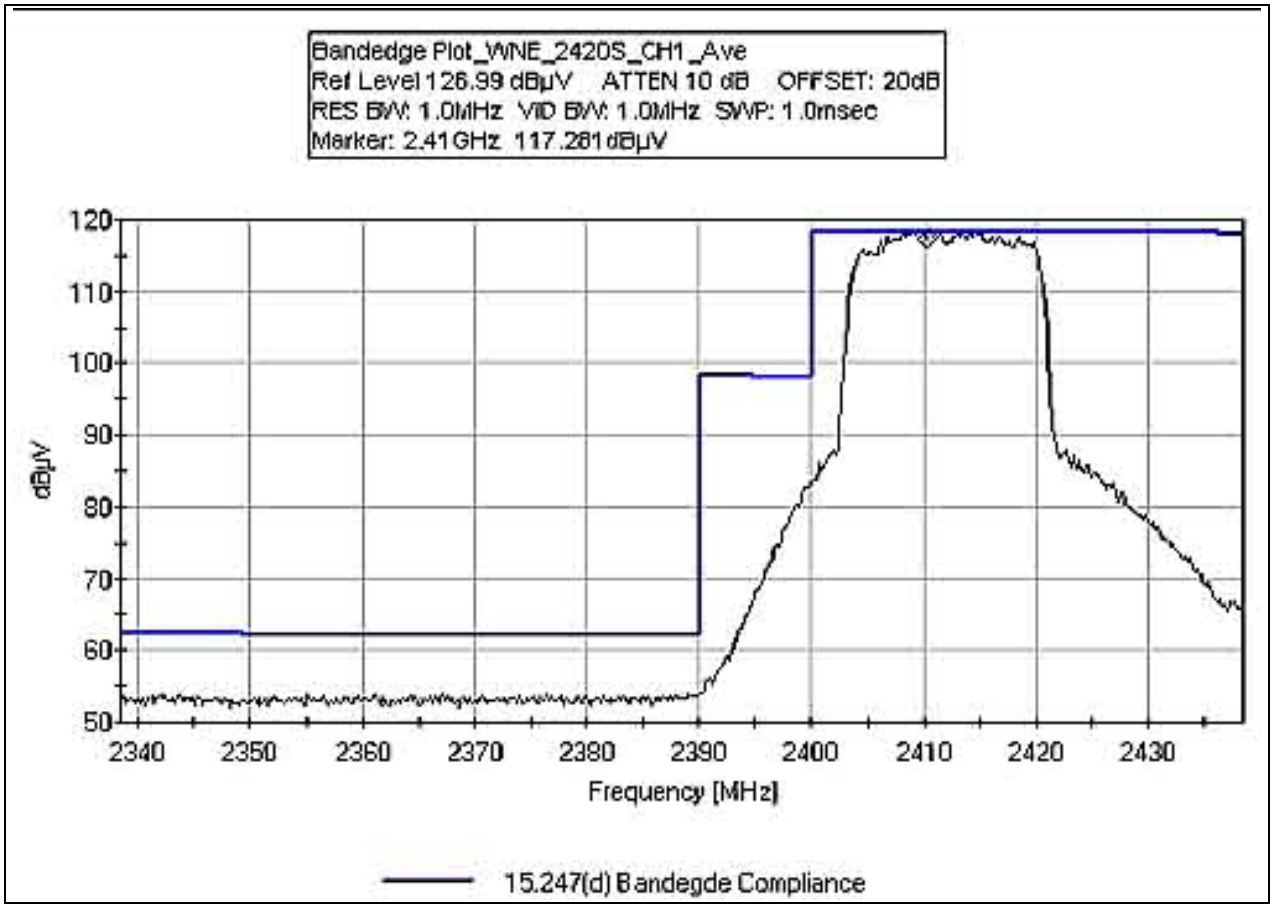
FCC 15.247(d) BANDEDGE - 24-AE-19F CHANNEL 1



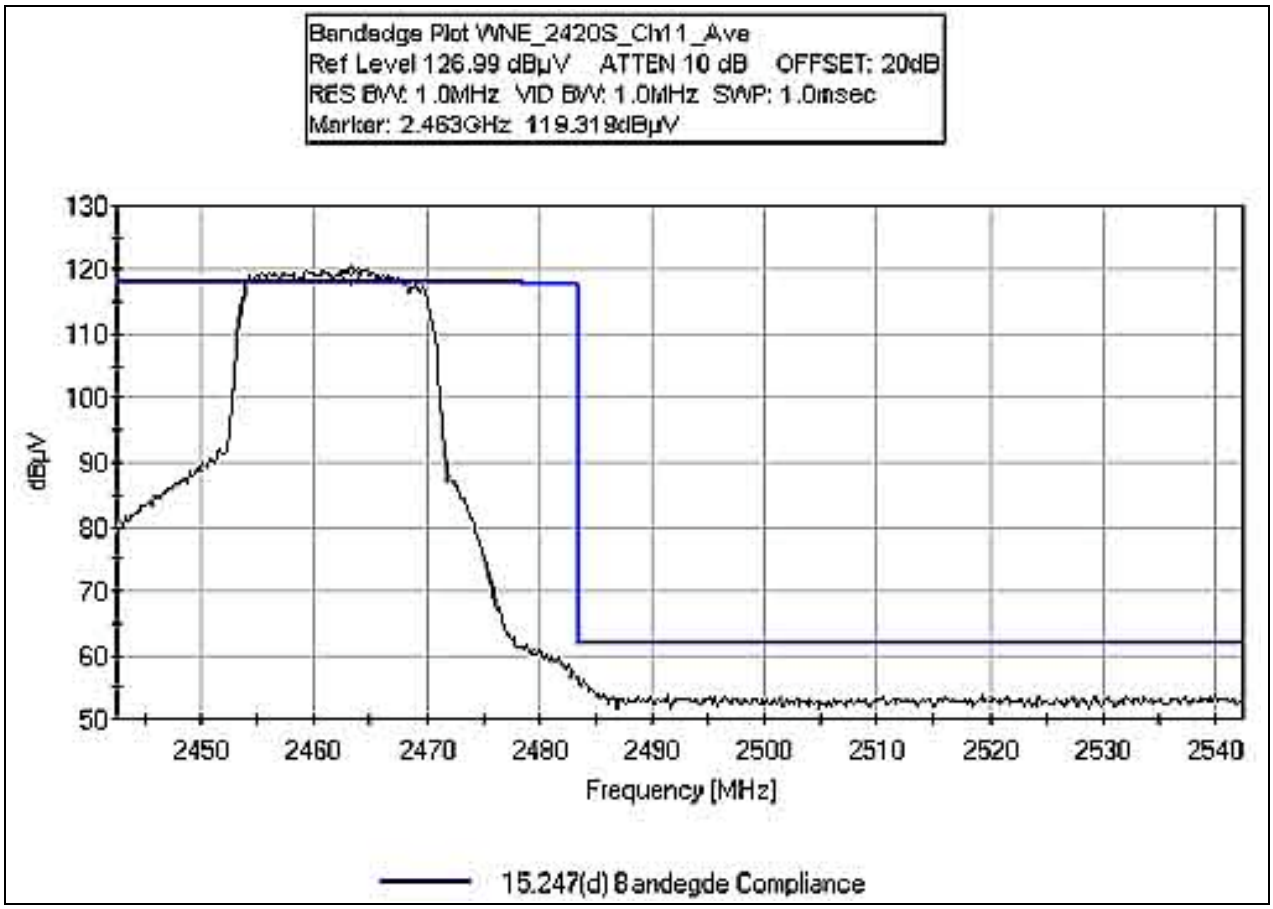
FCC 15.247(d) BANDEDGE - 24-AE-19F CHANNEL 11



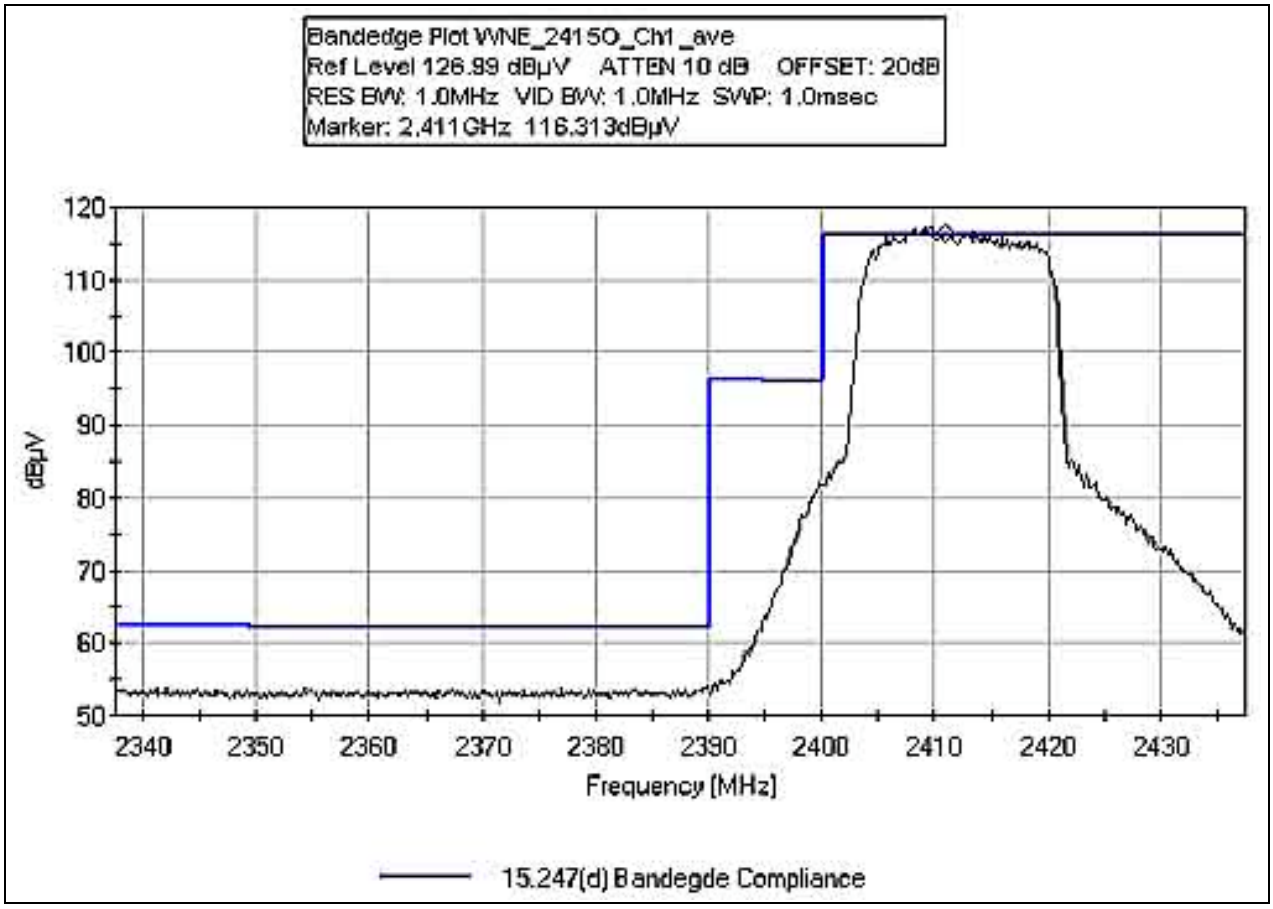
FCC 15.247(c) BANDEDGE - 24-LB-20S CHANNEL 1



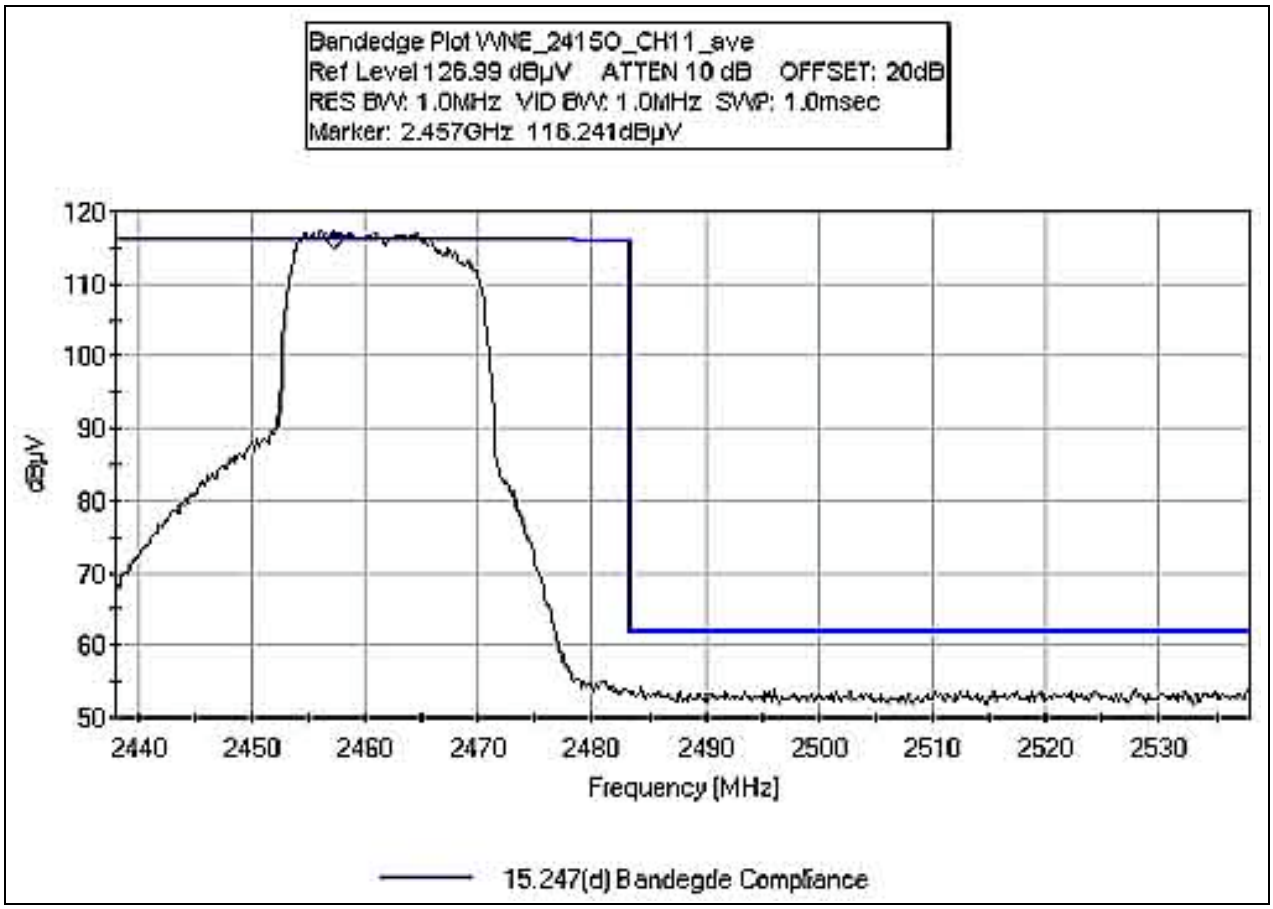
FCC 15.247(c) BANDEDGE - 24-LB-20S CHANNEL 11



FCC 15.247(d) BANDEDGE - 24-LB-15O CHANNEL 1



FCC 15.247(d) BANDEDGE - 24-LB-15O CHANNEL 11



TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

EUT SETUP

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the photographs in Appendix A. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables. The corrected data was then compared to the applicable emission limits to determine compliance.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available I/O ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. I/O cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The radiated and conducted emissions data of the EUT was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in Table A.

Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula in Table A. This reading was then compared to the applicable specification limit to determine compliance.

TABLE A: SAMPLE CALCULATIONS		
	Meter reading	(dBµV)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBµV/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Table A were used to collect both the radiated and conducted emissions data for the EUT. For radiated measurements from 30 to 1000 MHz, the biconilog antenna was used. The horn antenna was used for frequencies above 1000 MHz. Conducted emissions tests required the use of the FCC type LISNs.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dBµV, and a vertical scale of 10 dB per division.

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the Tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the six highest readings, this is indicated as a "Q" or an "A" in the appropriate table. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the Spectrum Analyzer or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called "peak hold," the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the HP Quasi-Peak Adapter for the HP Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer. To make these measurements, the test engineer reduces the video bandwidth on the analyzer until the modulation of the signal is filtered out. At this point the analyzer is set into the linear mode and the scan time is reduced.

EUT TESTING

Mains Conducted Emissions

During conducted emissions testing, the EUT was located on a non-conductive pole (mounted on a wooden pedestal) approximately 80 cm high from the conductive plane and 80 cm away from any other conductive surface. One wall of the room where the EUT was located has a minimum 2 meter by 2 meter conductive plane.

The vertical metal plane used for conducted emissions was grounded to the earth. Power to the EUT was provided through a LISN. The LISN was grounded to the ground plane. All other objects were kept a minimum of 80 cm away from the EUT during the conducted test.

The LISNs used were 50 µH-/+50 ohms. A 30 to 50 second sweep time was used for automated measurements in the frequency bands of 150 kHz to 500 kHz, and 500 kHz to 30 MHz. All readings within 20 dB of the limit were recorded, and those within 6 dB of the limit were examined with additional measurements using a slower sweep time.

Antenna Conducted Emissions

For measuring the signal strength on the RF output port of the EUT, the spectrum analyzer was connected directly to the EUT. The sweep time of the analyzer was adjusted so that the spectrum analyzer readings were always in a calibrated range. All readings within 20 dB of the limit were recorded.

Radiated Emissions

The EUT was mounted on a nonconductive pole (mounted on a wooden pedestal) approximately 80 cm high from the conductive plane and more than 80 cm awayfrom any other conductive surface.

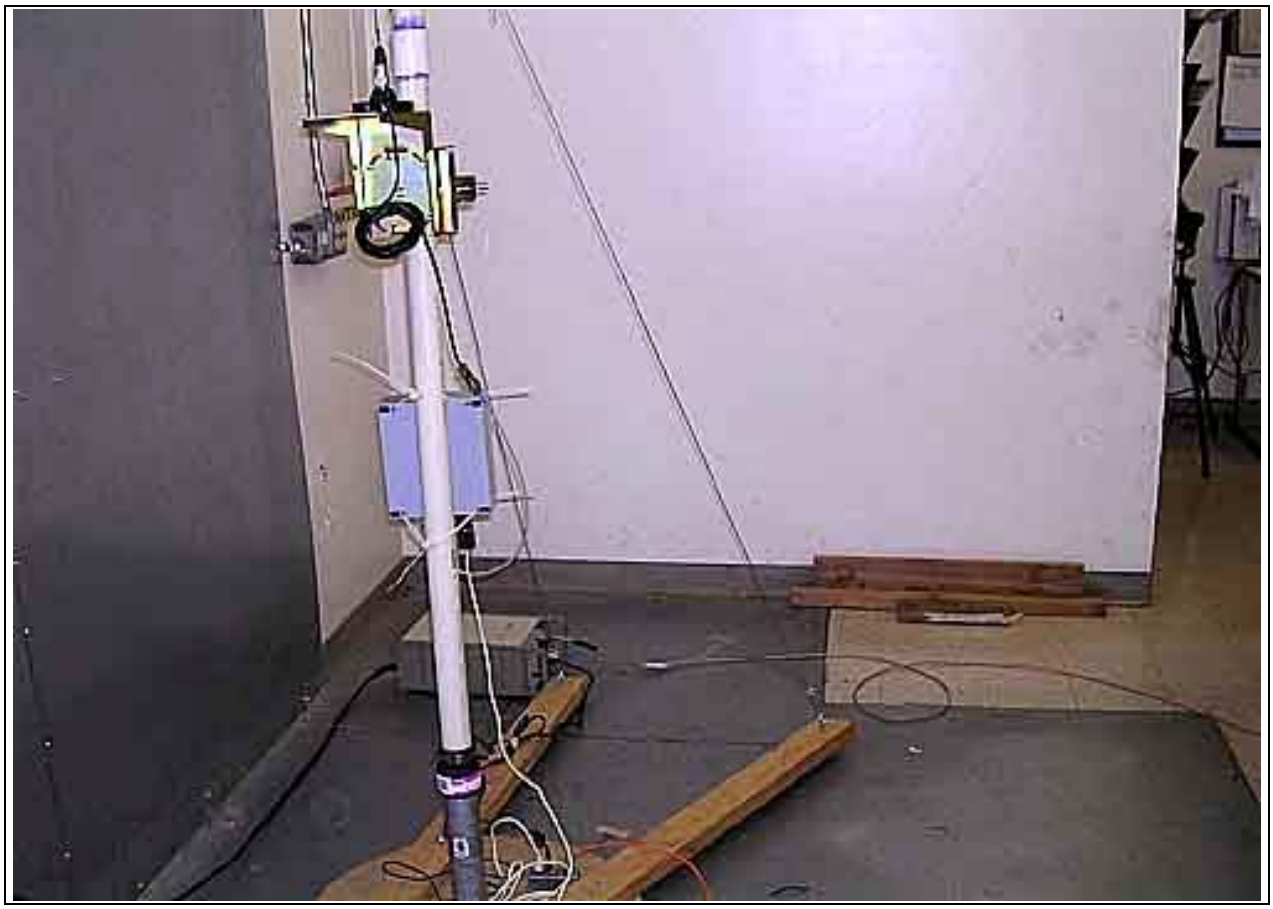
During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. The frequency range of 30 MHz to 1000 MHz was scanned with the biconilog antenna located about 1.5 meter above the ground plane in the vertical polarity. During this scan, the turntable was rotated and all peaks at or near the limit were recorded. A scan of the FM band from 88 to 110 MHz was then made using a reduced resolution bandwidth and frequency span. The biconilog antenna was changed to the horizontal polarity and the above steps were repeated. For frequencies exceeding 1000 MHz, the horn antenna was used. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

A thorough scan of all frequencies was made manually using a small frequency span, rotating the turntable and raising and lowering the antenna from one to four meters as needed. The test engineer maximized the readings with respect to the table rotation, antenna height and configuration of EUT. Maximizing of the EUT was achieved by monitoring the spectrum analyzer on a closed circuit television monitor.

APPENDIX A

TEST SETUP PHOTOGRAPHS

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

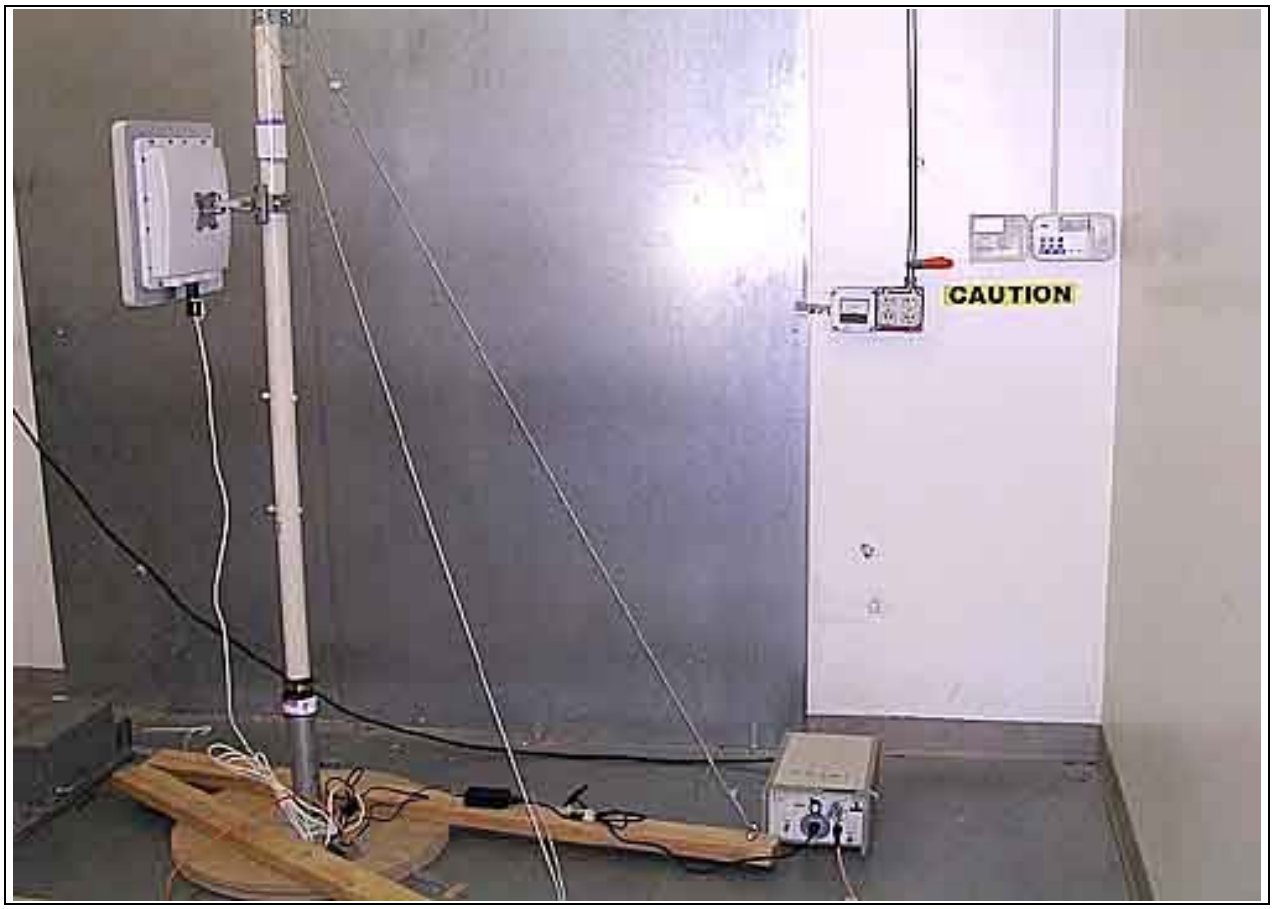


Mains Conducted Emissions - Front View - 24-SB-07M

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

Mains Conducted Emissions - Back View - 24-SB-07M

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

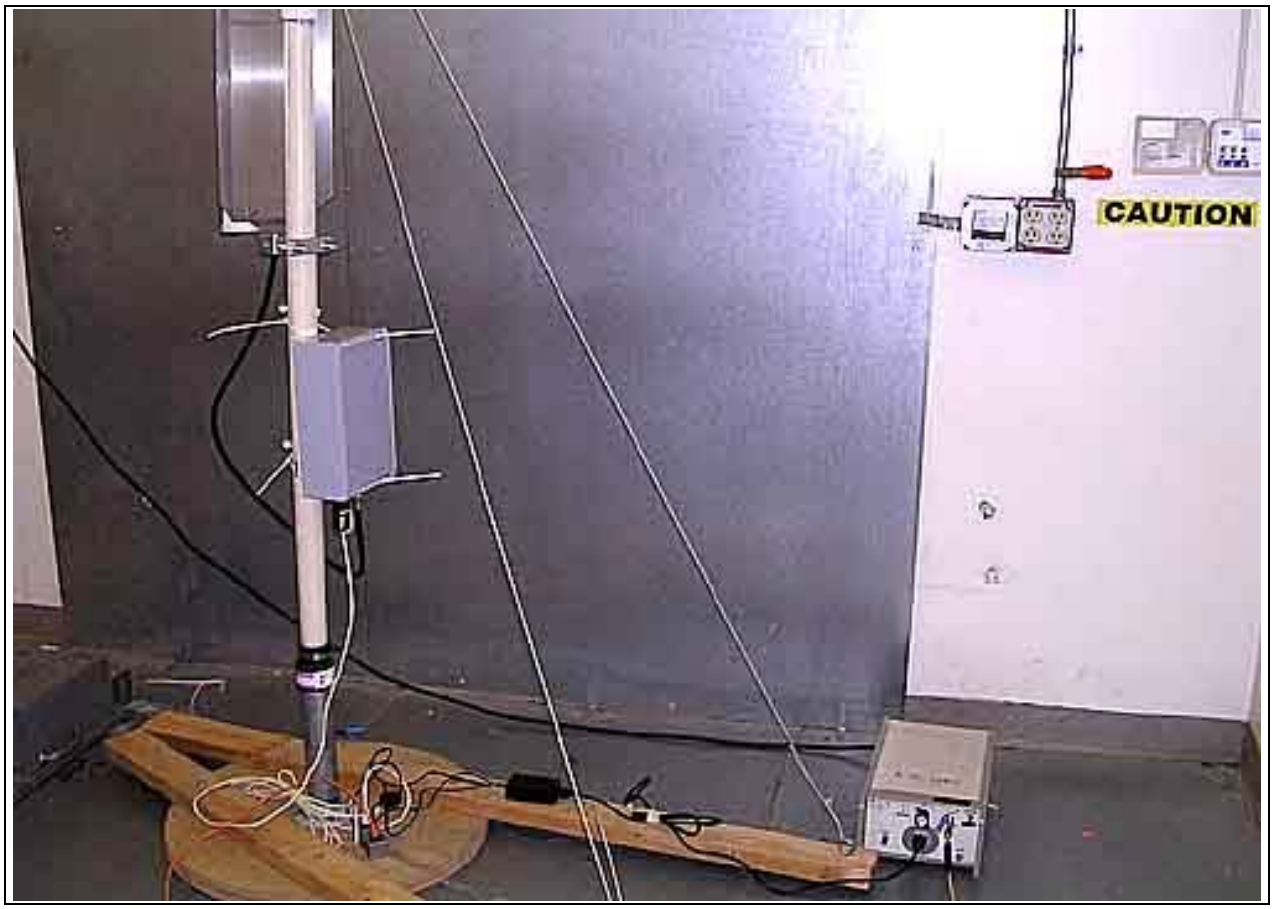


Mains Conducted Emissions - Front View - 24-AE-19F

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

Mains Conducted Emissions - Back View - 24-AE-19F

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS



Mains Conducted Emissions - Front View - 24-LB-20S

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS

Mains Conducted Emissions - Back View - 24-LB-20S

PHOTOGRAPH SHOWING RADIATED EMISSIONS

FCC 15.109 Radiated Emissions - Front View - 24-SB-07M

PHOTOGRAPH SHOWING RADIATED EMISSIONS

FCC 15.109 Radiated Emissions - Back View - 24-SB-07M

PHOTOGRAPH SHOWING RADIATED EMISSIONS

FCC 15.109 Radiated Emissions - Front View - 24-AE-19F

PHOTOGRAPH SHOWING RADIATED EMISSIONS

FCC 15.109 Radiated Emissions - Back View - 24-AE-19F

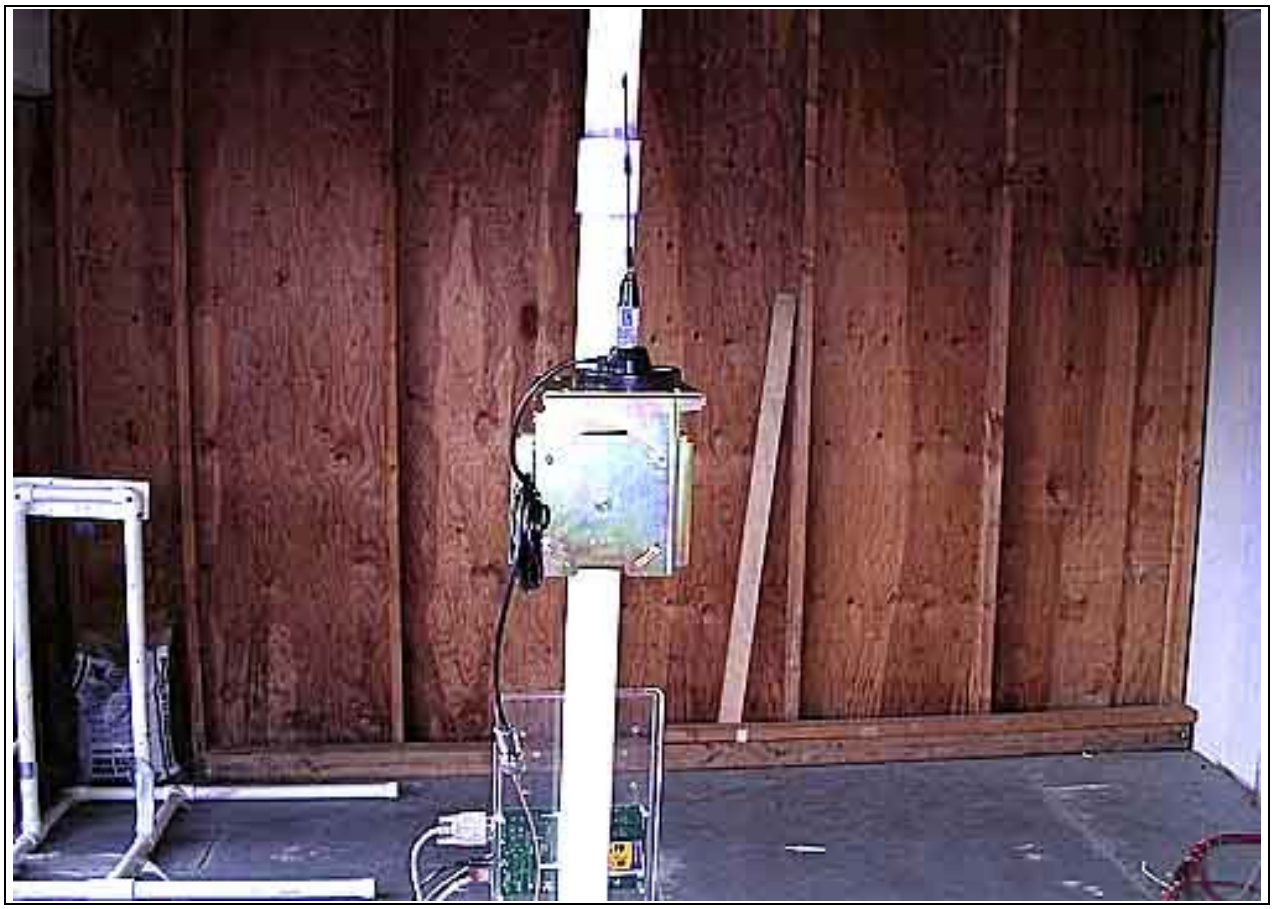
PHOTOGRAPH SHOWING RADIATED EMISSIONS

FCC 15.109 Radiated Emissions - Front View - 24-LB-20S

PHOTOGRAPH SHOWING RADIATED EMISSIONS

FCC 15.109 Radiated Emissions - Back View - 24-LB-20S

PHOTOGRAPH SHOWING RADIATED EMISSIONS

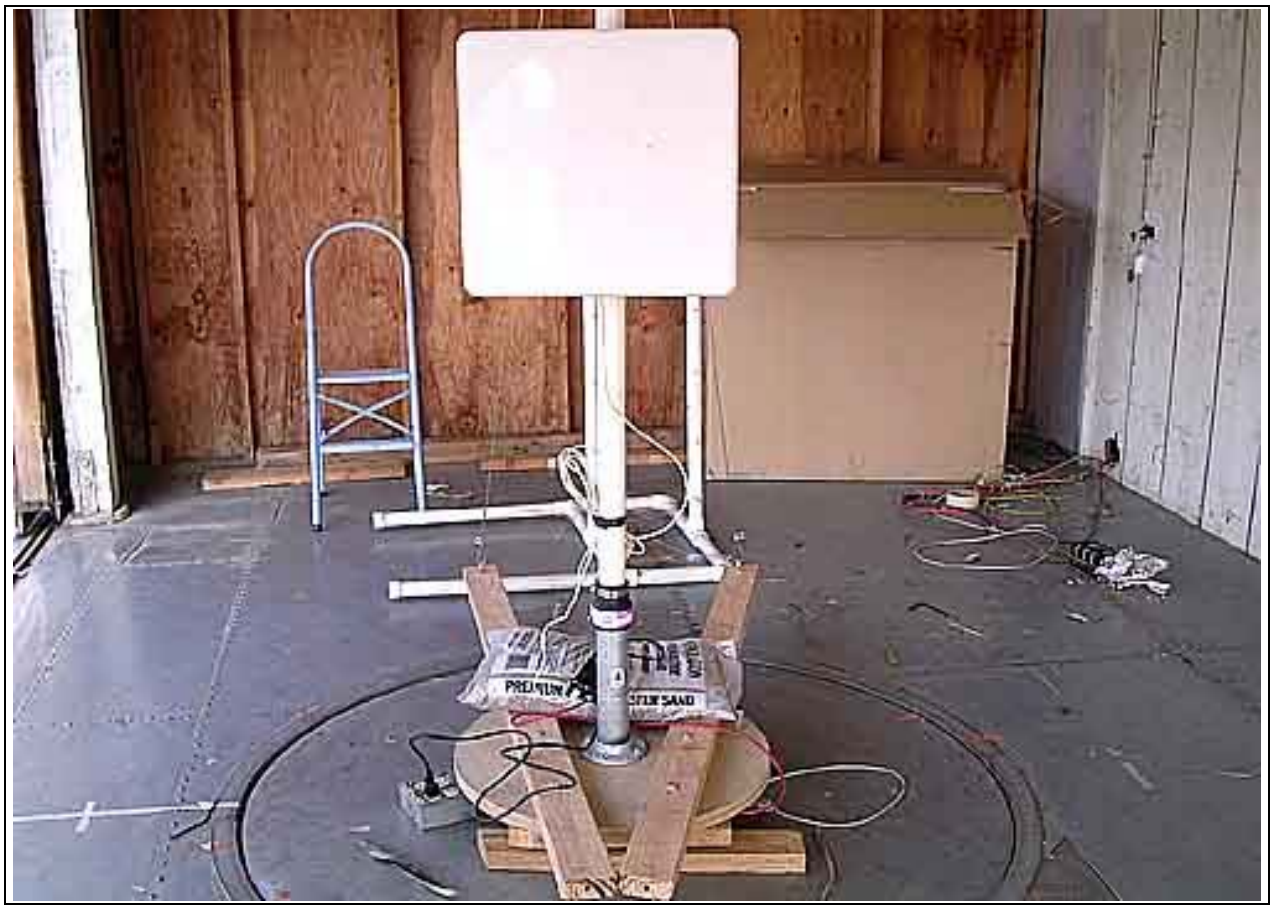


15.247(d) Radiated Emissions - Front View - 24-SB-07M

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View - 24-SB-07M

PHOTOGRAPH SHOWING RADIATED EMISSIONS

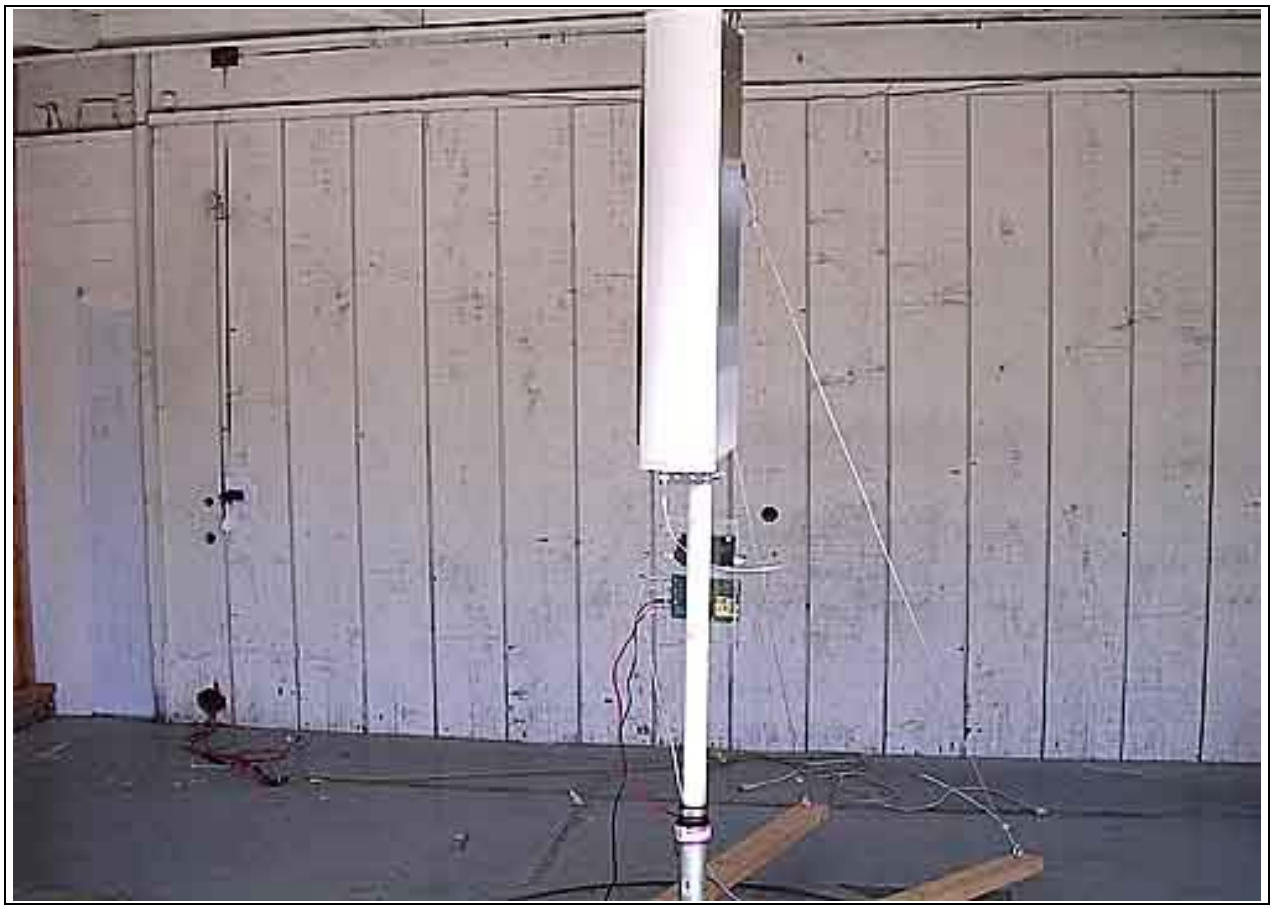


Radiated Emissions - Front View - 24-AE-19F

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View - 24-AE-19F

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View - 24-LB-20S

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View - 24-LB-20S

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Front View - 24-LB-15O

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View - 24-LB-15O

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP

RF Power- 24-SB-07M

PHOTOGRAPH SHOWING DIRECT CONNECT TEST SETUP

RF Power- 24-LB-15O

APPENDIX B

TEST EQUIPMENT LIST

Conducted Emissions 15.107, 15.207

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer RF Section	02462	HP	8568B	2928A04874	100804	100806
Spectrum Analyzer Display Section	02472	HP	85662A	3001A18430	100804	100806
QP Adapter	01437	HP	85650A	3303A01884	100804	100806
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407
Conducted Cable	04358	Harbour Ind	RG142	Cable # 21	070204	070206
150kHZ HPF	02610	TTE	HB9615-150k-50-720	G7755	041606	041606
6dB Attenuator	P05267	Weinschel	18W	(none)	092805	092807
LISN	00847	EMCO	3816/2NM	1104	120804	120806
LISN	00276, 00277, 00278	Solar	8028-50-TS-24BNC	B2	091505	091507

Radiated Emissions 15.109, 15.247(d)

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407
30-1000MHz						
Biconilog Antenna	01995	Chase	CBL6111C	2451	080105	080107
Pre-amp	00309	HP	8447D	1937A02548	071404	071406
Antenna cable	PO5198	Belden	RG214	Cable#15	010305	010307
Pre-amp to SA cable	NA	Pasternack	RG223/U	Cable#10	051605	051606
1-18GHz						
Horn Antenna	0849	EMCO	3115	6246	072204	072206
Microwave Pre-amp	00786	HP	83017A	3123A00281	081204	081206
Heliax Antenna cable	NA	Andrew	LDF1-50	Cable#20	091604	091606
24” SMA Cable (White)	P05204	Pasterneck	35591-48	1-40GHz_white	020805	020807
2.4 GHz HPF	01440	K&L	91H31-3000	001	042505	042507
8.2 GHz HPF	02118	HP	84300-80039	3643A00027	062705	062707
18-26GHz						
2.4 GHz HPF	01440	K&L	91H31-3000	001	042505	042507
8.2 GHz HPF	02118	HP	84300-80039	3643A00027	062705	062707
18-26.5 GHz Horn Antenna	02112	HP	84125-8008	3643A00027	110504	110506
26-40GHz						
2.4 GHz HPF	01440	K&L	91H31-3000	001	042505	042507
8.2 GHz HPF	02118	HP	84300-80039	3643A00027	062705	062707
26.5-40 GHz Horn Antenna	02045	ARA	MWH-2640/B	1012	102505	102507
Amplifier	02115	HP	83051A	3332A00309	040105	040107

15.247(b)(3) Peak RF Output power

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

APPENDIX C
MEASUREMENT DATA SHEETS

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.107 Class A COND AVE**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	4:07:39 PM
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	8
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2419F		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Antenna	MTI Wireless Edge	MT-345013	NA
Router Board	Mikrotik	RB/532	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are installed inside the flat panel antenna. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 19 dBi. Frequency = 2437 MHz. Mode = RX 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

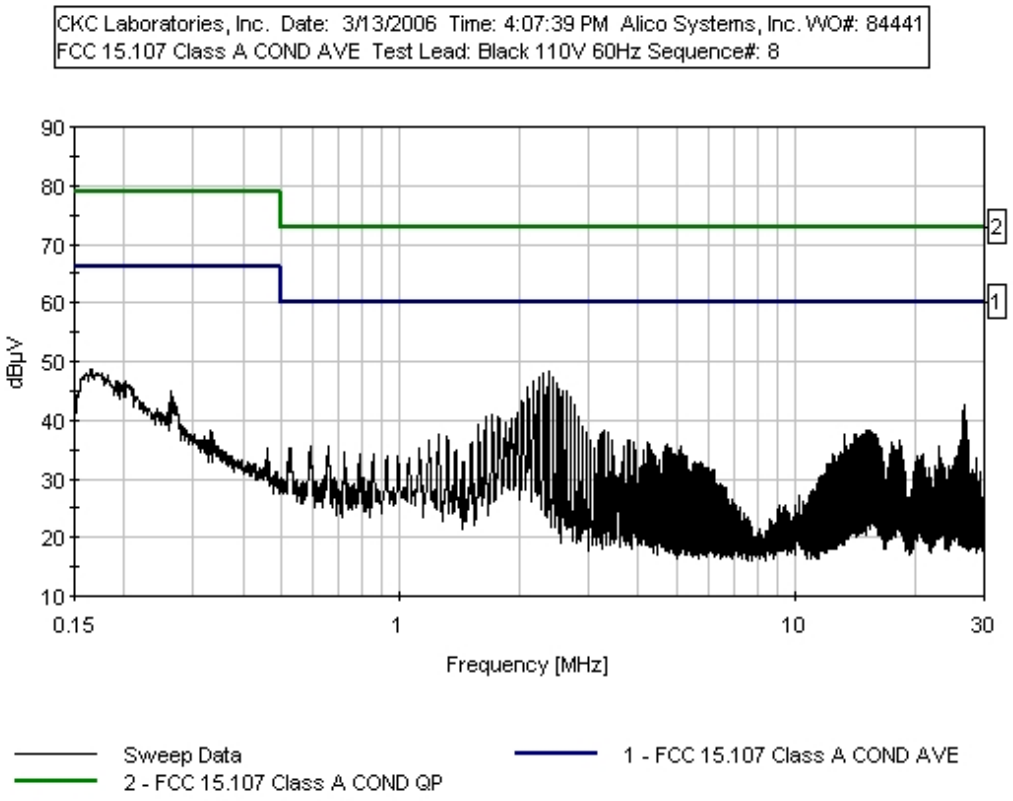
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2.370M	42.1	+0.1	+5.8	+0.2	+0.1	+0.0	48.3	60.0	-11.7	Black
2	2.302M	41.7	+0.1	+5.8	+0.2	+0.1	+0.0	47.9	60.0	-12.1	Black
3	2.234M	41.4	+0.1	+5.8	+0.1	+0.0	+0.0	47.4	60.0	-12.6	Black
4	2.438M	41.2	+0.1	+5.8	+0.2	+0.1	+0.0	47.4	60.0	-12.6	Black
5	2.170M	40.5	+0.1	+5.8	+0.1	+0.0	+0.0	46.5	60.0	-13.5	Black
6	2.502M	40.1	+0.1	+5.8	+0.2	+0.1	+0.0	46.3	60.0	-13.7	Black

7	2.102M	39.5	+0.1	+5.8	+0.1	+0.0	+0.0	45.5	60.0	-14.5	Black
8	2.566M	38.8	+0.1	+5.8	+0.2	+0.1	+0.0	45.0	60.0	-15.0	Black
9	2.634M	38.8	+0.1	+5.8	+0.2	+0.1	+0.0	45.0	60.0	-15.0	Black
10	2.697M	37.6	+0.1	+5.8	+0.2	+0.1	+0.0	43.8	60.0	-16.2	Black
11	2.034M	37.3	+0.1	+5.8	+0.1	+0.0	+0.0	43.3	60.0	-16.7	Black
12	163.817k	42.2	+0.5	+5.8	+0.0	+0.1	+0.0	48.6	66.0	-17.4	Black
13	2.765M	36.4	+0.1	+5.8	+0.2	+0.1	+0.0	42.6	60.0	-17.4	Black
14	26.608M	34.9	+0.3	+5.8	+0.4	+1.1	+0.0	42.5	60.0	-17.5	Black
15	26.485M	33.9	+0.3	+5.8	+0.4	+1.1	+0.0	41.5	60.0	-18.5	Black



Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.107 Class A COND AVE**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	4:00:13 PM
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	7
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2419F		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Antenna	HyperLink Technologies	HG2420P-120	NA
Router Board	Mikrotik	RB/532	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are installed inside the flat panel antenna. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 19 dBi. Frequency = 2437 MHz. Mode = RX. 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

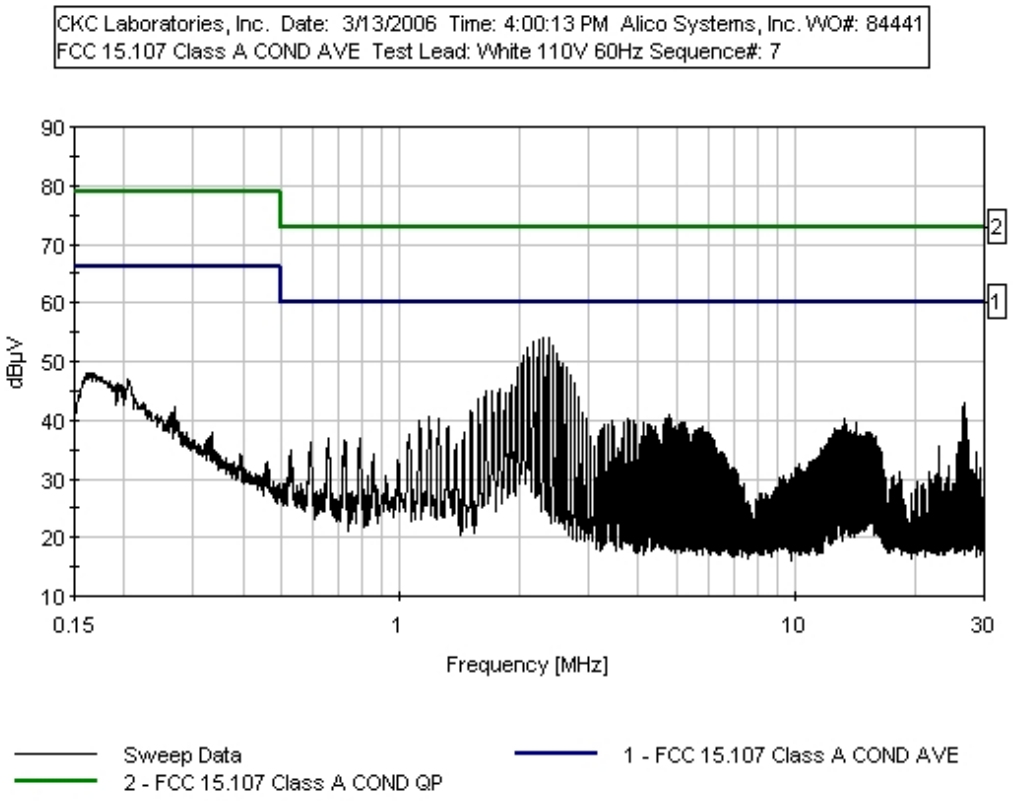
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2.302M	47.9	+0.1	+5.8	+0.2	+0.1	+0.0	54.1	60.0	-5.9	White
2	2.370M	47.8	+0.1	+5.8	+0.2	+0.1	+0.0	54.0	60.0	-6.0	White
3	2.234M	47.7	+0.1	+5.8	+0.1	+0.0	+0.0	53.7	60.0	-6.3	White
4	2.170M	47.2	+0.1	+5.8	+0.1	+0.0	+0.0	53.2	60.0	-6.8	White
5	2.434M	46.6	+0.1	+5.8	+0.2	+0.1	+0.0	52.8	60.0	-7.2	White
6	2.106M	46.5	+0.1	+5.8	+0.1	+0.0	+0.0	52.5	60.0	-7.5	White

7	2.502M	45.1	+0.1	+5.8	+0.2	+0.1	+0.0	51.3	60.0	-8.7	White
8	2.042M	44.9	+0.1	+5.8	+0.1	+0.0	+0.0	50.9	60.0	-9.1	White
9	2.566M	43.3	+0.1	+5.8	+0.2	+0.1	+0.0	49.5	60.0	-10.5	White
10	2.634M	42.8	+0.1	+5.8	+0.2	+0.1	+0.0	49.0	60.0	-11.0	White
11	1.974M	42.9	+0.1	+5.8	+0.1	+0.0	+0.0	48.9	60.0	-11.1	White
12	2.697M	41.6	+0.1	+5.8	+0.2	+0.1	+0.0	47.8	60.0	-12.2	White
13	2.765M	40.1	+0.1	+5.8	+0.2	+0.1	+0.0	46.3	60.0	-13.7	White
14	1.906M	40.1	+0.1	+5.8	+0.1	+0.0	+0.0	46.1	60.0	-13.9	White
15	1.779M	39.4	+0.1	+5.8	+0.1	+0.0	+0.0	45.4	60.0	-14.6	White



Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.107 Class A COND AVE**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	4:38:48 PM
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	10
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Antenna	HyperLink Technologies	HG2420P-120	NA
Router Board	Mikrotik	RB/532	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in enclosure, mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi Sector. Frequency = 2437 MHz. Mode: RX. 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

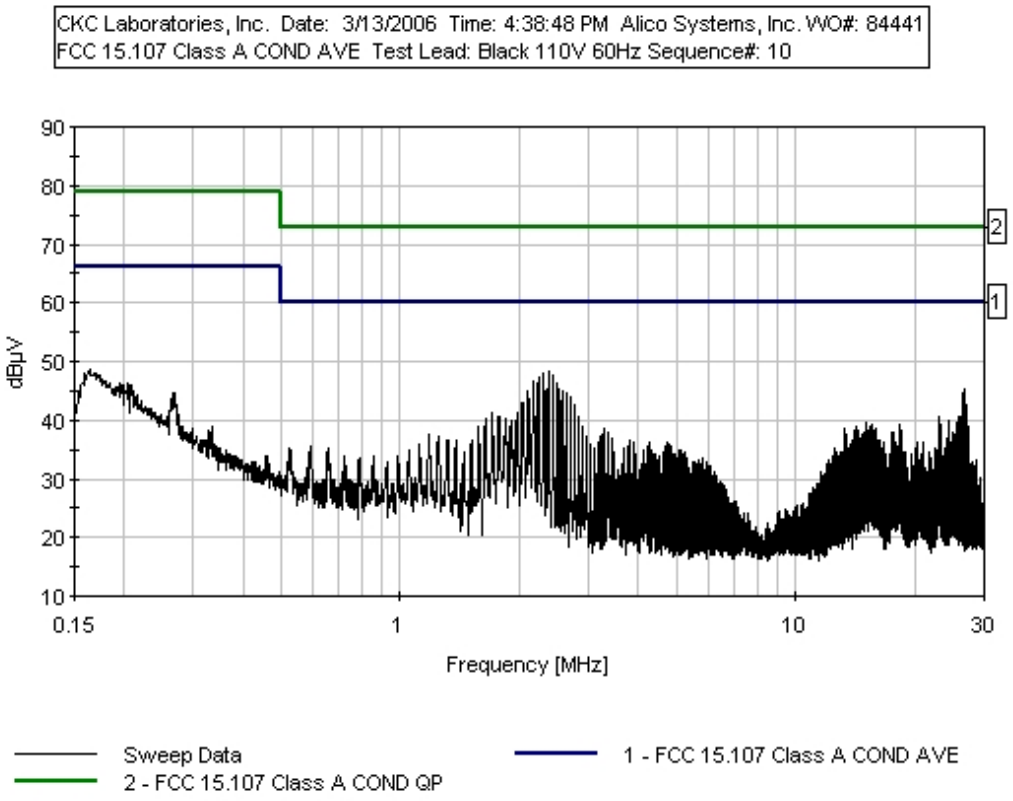
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2.370M	42.0	+0.1	+5.8	+0.2	+0.1	+0.0	48.2	60.0	-11.8	Black
2	2.302M	41.9	+0.1	+5.8	+0.2	+0.1	+0.0	48.1	60.0	-11.9	Black
3	2.438M	41.5	+0.1	+5.8	+0.2	+0.1	+0.0	47.7	60.0	-12.3	Black
4	2.234M	41.3	+0.1	+5.8	+0.1	+0.0	+0.0	47.3	60.0	-12.7	Black
5	2.166M	40.5	+0.1	+5.8	+0.1	+0.0	+0.0	46.5	60.0	-13.5	Black
6	2.502M	40.0	+0.1	+5.8	+0.2	+0.1	+0.0	46.2	60.0	-13.8	Black

7	26.608M	37.7	+0.3	+5.8	+0.4	+1.1	+0.0	45.3	60.0	-14.7	Black
8	2.102M	39.1	+0.1	+5.8	+0.1	+0.0	+0.0	45.1	60.0	-14.9	Black
9	2.570M	38.6	+0.1	+5.8	+0.2	+0.1	+0.0	44.8	60.0	-15.2	Black
10	26.485M	37.1	+0.3	+5.8	+0.4	+1.1	+0.0	44.7	60.0	-15.3	Black
11	2.634M	38.4	+0.1	+5.8	+0.2	+0.1	+0.0	44.6	60.0	-15.4	Black
12	2.697M	37.7	+0.1	+5.8	+0.2	+0.1	+0.0	43.9	60.0	-16.1	Black
13	26.547M	36.3	+0.3	+5.8	+0.4	+1.1	+0.0	43.9	60.0	-16.1	Black
14	2.038M	37.0	+0.1	+5.8	+0.1	+0.0	+0.0	43.0	60.0	-17.0	Black
15	2.761M	36.4	+0.1	+5.8	+0.2	+0.1	+0.0	42.6	60.0	-17.4	Black



Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.107 Class A COND AVE**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	4:33:55 PM
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	9
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Router Board	Mikrotik	RB/532	NA
Antenna	HyperLink Technologies	HG2420P-120	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in enclosure, mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi Sector. Frequency = 2437 MHz. Mode: RX 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

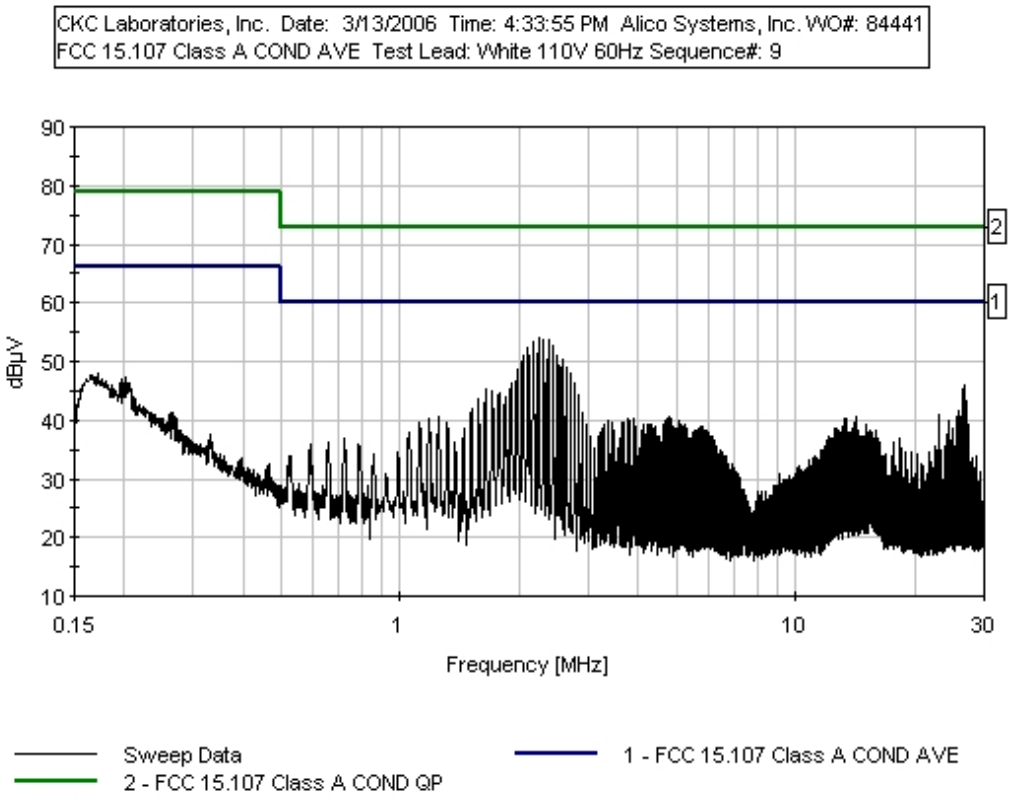
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2.238M	47.8	+0.1	+5.8	+0.2	+0.1	+0.0	54.0	60.0	-6.0	White
2	2.302M	47.6	+0.1	+5.8	+0.2	+0.1	+0.0	53.8	60.0	-6.2	White
3	2.370M	47.5	+0.1	+5.8	+0.2	+0.1	+0.0	53.7	60.0	-6.3	White
4	2.170M	47.2	+0.1	+5.8	+0.1	+0.0	+0.0	53.2	60.0	-6.8	White
5	2.434M	46.6	+0.1	+5.8	+0.2	+0.1	+0.0	52.8	60.0	-7.2	White
6	2.106M	46.4	+0.1	+5.8	+0.1	+0.0	+0.0	52.4	60.0	-7.6	White

7	2.038M	45.0	+0.1	+5.8	+0.1	+0.0	+0.0	51.0	60.0	-9.0	White
8	2.502M	44.8	+0.1	+5.8	+0.2	+0.1	+0.0	51.0	60.0	-9.0	White
9	2.570M	44.3	+0.1	+5.8	+0.2	+0.1	+0.0	50.5	60.0	-9.5	White
10	2.629M	42.7	+0.1	+5.8	+0.2	+0.1	+0.0	48.9	60.0	-11.1	White
11	1.974M	42.7	+0.1	+5.8	+0.1	+0.0	+0.0	48.7	60.0	-11.3	White
12	2.697M	41.7	+0.1	+5.8	+0.2	+0.1	+0.0	47.9	60.0	-12.1	White
13	1.906M	40.3	+0.1	+5.8	+0.1	+0.0	+0.0	46.3	60.0	-13.7	White
14	2.761M	40.0	+0.1	+5.8	+0.2	+0.1	+0.0	46.2	60.0	-13.8	White
15	26.608M	38.3	+0.3	+5.8	+0.4	+1.0	+0.0	45.8	60.0	-14.2	White



Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.107 Class A COND AVE**		
Work Order #:	**84441**	Date:	3/14/2006
Test Type:	**Conducted Emissions**	Time:	8:38:40 AM
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	9
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2407M		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA
Router Board	Mikrotik	RB/532	NA
Antenna	Pacific Wireless	MA24-7	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi Omni Receiver. Frequency = 2437 MHz. Mode: RX 110Vac, 60 Hz, 21°C, 43% relative humidity. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 PCB repositioned to mate with mounting hole. Passive POE Enclosure: Hammond R191-170-000 Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

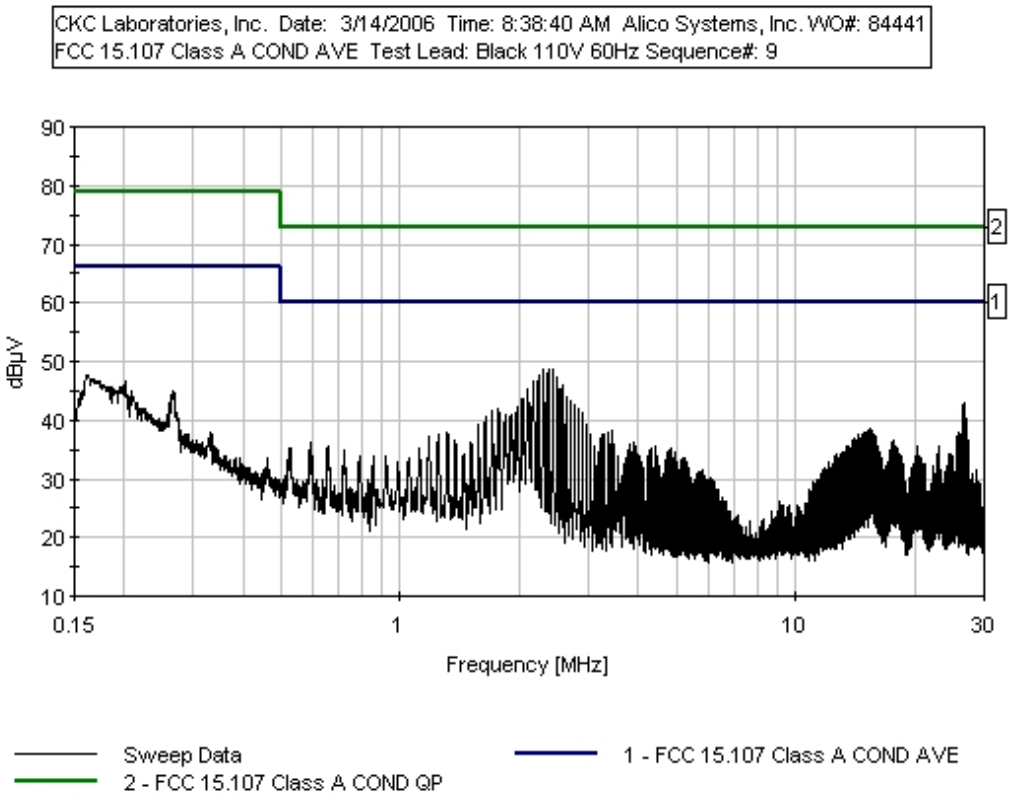
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2.370M	42.5	+0.1	+5.8	+0.2	+0.1	+0.0	48.7	60.0	-11.3	Black
2	2.434M	42.5	+0.1	+5.8	+0.2	+0.1	+0.0	48.7	60.0	-11.3	Black
3	2.298M	42.4	+0.1	+5.8	+0.2	+0.1	+0.0	48.6	60.0	-11.4	Black
4	2.234M	41.8	+0.1	+5.8	+0.1	+0.0	+0.0	47.8	60.0	-12.2	Black
5	2.502M	41.2	+0.1	+5.8	+0.2	+0.1	+0.0	47.4	60.0	-12.6	Black
6	2.166M	40.6	+0.1	+5.8	+0.1	+0.0	+0.0	46.6	60.0	-13.4	Black

7	2.566M	39.6	+0.1	+5.8	+0.2	+0.1	+0.0	45.8	60.0	-14.2	Black
8	2.098M	39.2	+0.1	+5.8	+0.1	+0.0	+0.0	45.2	60.0	-14.8	Black
9	2.629M	37.8	+0.1	+5.8	+0.2	+0.1	+0.0	44.0	60.0	-16.0	Black
10	2.038M	37.7	+0.1	+5.8	+0.1	+0.0	+0.0	43.7	60.0	-16.3	Black
11	2.697M	37.2	+0.1	+5.8	+0.2	+0.1	+0.0	43.4	60.0	-16.6	Black
12	26.608M	35.4	+0.3	+5.8	+0.4	+1.1	+0.0	43.0	60.0	-17.0	Black
13	2.761M	36.3	+0.1	+5.8	+0.2	+0.1	+0.0	42.5	60.0	-17.5	Black
14	26.485M	34.9	+0.3	+5.8	+0.4	+1.1	+0.0	42.5	60.0	-17.5	Black
15	1.970M	36.3	+0.1	+5.8	+0.1	+0.0	+0.0	42.3	60.0	-17.7	Black



Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.107 Class A COND AVE**		
Work Order #:	**84441**	Date:	3/14/2006
Test Type:	**Conducted Emissions**	Time:	8:34:34 AM
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	8
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2407M		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Antenna	Pacific Wireless	MA24-7	NA
Router Board	Mikrotik	RB/532	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi Omni Receiver. Frequency = 2437 MHz. Mode: RX. 110Vac, 60 Hz, 21°C, 43% relative humidity. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 PCB repositioned to mate with mounting hole. Passive POE Enclosure: Hammond R191-170-000 Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

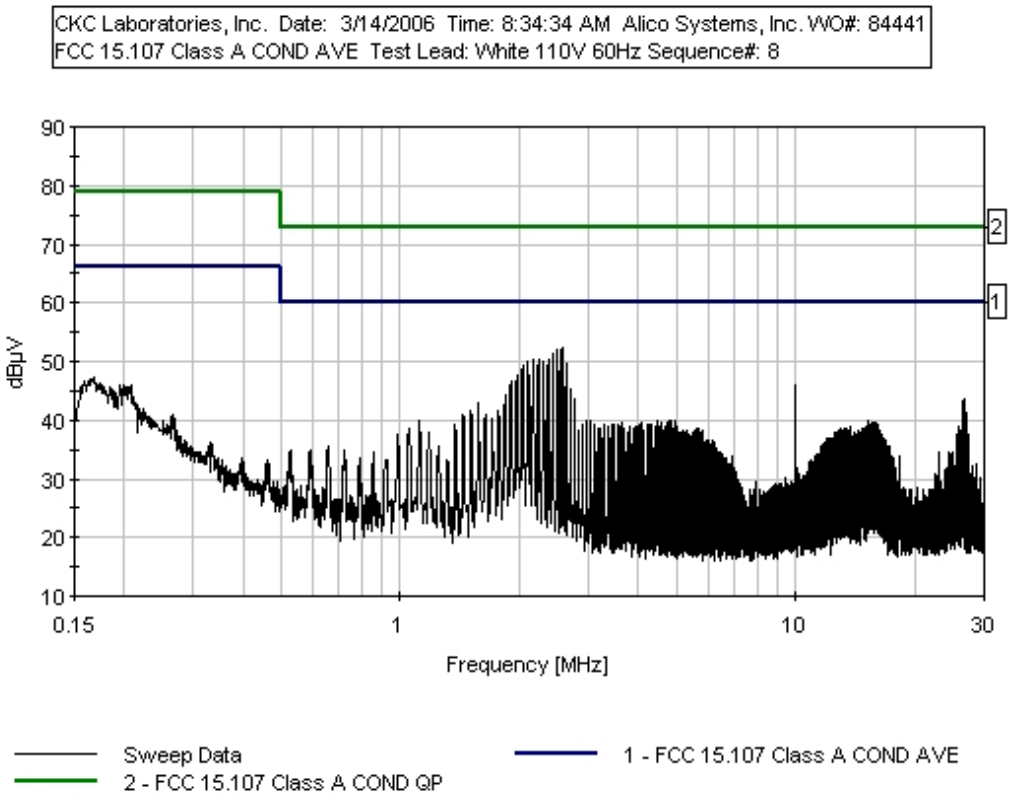
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2.566M	46.1	+0.1	+5.8	+0.2	+0.1	+0.0	52.3	60.0	-7.7	White
2	2.497M	45.8	+0.1	+5.8	+0.2	+0.1	+0.0	52.0	60.0	-8.0	White
3	2.434M	45.3	+0.1	+5.8	+0.2	+0.1	+0.0	51.5	60.0	-8.5	White
4	2.366M	44.3	+0.1	+5.8	+0.2	+0.1	+0.0	50.5	60.0	-9.5	White
5	2.166M	44.2	+0.1	+5.8	+0.1	+0.0	+0.0	50.2	60.0	-9.8	White
6	2.238M	44.0	+0.1	+5.8	+0.2	+0.1	+0.0	50.2	60.0	-9.8	White

7	2.302M	43.8	+0.1	+5.8	+0.2	+0.1	+0.0	50.0	60.0	-10.0	White
8	2.102M	43.9	+0.1	+5.8	+0.1	+0.0	+0.0	49.9	60.0	-10.1	White
9	2.629M	43.6	+0.1	+5.8	+0.2	+0.1	+0.0	49.8	60.0	-10.2	White
10	2.038M	43.3	+0.1	+5.8	+0.1	+0.0	+0.0	49.3	60.0	-10.7	White
11	1.974M	41.8	+0.1	+5.8	+0.1	+0.0	+0.0	47.8	60.0	-12.2	White
12	1.906M	40.5	+0.1	+5.8	+0.1	+0.0	+0.0	46.5	60.0	-13.5	White
13	10.031M	39.4	+0.1	+5.8	+0.3	+0.5	+0.0	46.1	60.0	-13.9	White
14	2.693M	39.2	+0.1	+5.8	+0.2	+0.1	+0.0	45.4	60.0	-14.6	White
15	1.843M	38.3	+0.1	+5.8	+0.1	+0.0	+0.0	44.3	60.0	-15.7	White



Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Alico Systems, Inc.**
Specification: **FCC 15.109 Class A**
Work Order #: **84441** Date: 3/13/2006
Test Type: **Radiated Scan** Time: 10:23:34
Equipment: **Broadband 802.11 B/G/A Access Point and Bridge** Sequence#: 5
Manufacturer: Alico Systems, Inc Tested By: E. Wong
Model: WNE-2407M
S/N:

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Router Board	Mikrotik	RB/532	NA
Antenna	Pacific Wireless	MA24-7	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi Omni Receiver. Frequency = 2437 MHz. Power level = Idle, receive mode. 110Vac, 60 Hz, 21°C, 43% relative humidity. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 PCB repositioned to mate with mounting hole. Passive POE Enclosure: Hammond R191-170-000.

Transducer Legend:

T1=Bilog 2451 080107	T2=Cable #10 051606
T3=Cable #15, Site A, 010307	T4=Preamp 8447D 071406

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	49.879M	64.0	+7.8	+0.1	+1.2	-27.7	-10.0	35.4	39.1	-3.7	Vert
2	231.000M	65.4	+10.5	+0.2	+2.8	-27.6	-10.0	41.3	46.4	-5.1	Vert
3	560.970M	52.6	+20.5	+0.5	+4.6	-27.6	-10.0	40.6	46.4	-5.8	Horiz
4	85.979M	60.2	+8.1	+0.1	+1.6	-27.7	-10.0	32.3	39.1	-6.8	Vert
5	374.998M	57.0	+15.3	+0.3	+3.7	-27.5	-10.0	38.8	46.4	-7.6	Vert
6	87.193M	58.8	+8.3	+0.1	+1.6	-27.7	-10.0	31.1	39.1	-8.0	Vert
7	84.738M	57.9	+7.9	+0.1	+1.6	-27.7	-10.0	29.8	39.1	-9.3	Vert

8	374.993M	55.0	+15.3	+0.3	+3.7	-27.5	-10.0	36.8	46.4	-9.6	Horiz
9	49.613M	57.8	+7.9	+0.1	+1.2	-27.7	-10.0	29.3	39.1	-9.8	Vert
10	81.178M	57.5	+7.3	+0.1	+1.6	-27.7	-10.0	28.8	39.1	-10.3	Vert
11	99.035M	58.5	+9.8	+0.1	+1.8	-27.6	-10.0	32.6	43.5	-10.9	Vert
12	82.949M	56.5	+7.6	+0.1	+1.6	-27.7	-10.0	28.1	39.1	-11.0	Vert
13	82.929M	56.0	+7.6	+0.1	+1.6	-27.7	-10.0	27.6	39.1	-11.5	Vert
14	48.990M	55.7	+8.2	+0.1	+1.2	-27.7	-10.0	27.5	39.1	-11.6	Vert
15	165.003M	56.3	+9.8	+0.2	+2.4	-27.6	-10.0	31.1	43.5	-12.4	Vert
16	231.000M	57.4	+10.5	+0.2	+2.8	-27.6	-10.0	33.3	46.4	-13.1	Horiz
17	56.798M	55.9	+5.6	+0.1	+1.3	-27.7	-10.0	25.2	39.1	-13.9	Vert
18	45.699M	51.6	+9.9	+0.1	+1.2	-27.7	-10.0	25.1	39.1	-14.0	Vert
19	249.980M	53.6	+12.0	+0.2	+3.0	-27.5	-10.0	31.3	46.4	-15.1	Vert
20	90.905M	55.4	+8.8	+0.1	+1.6	-27.7	-10.0	28.2	43.5	-15.3	Vert
21	626.970M	42.6	+19.9	+0.5	+4.9	-27.1	-10.0	30.8	46.4	-15.6	Horiz
22	215.770M	53.2	+9.2	+0.2	+2.7	-27.6	-10.0	27.7	43.5	-15.8	Horiz
23	49.920M	51.7	+7.7	+0.1	+1.2	-27.7	-10.0	23.0	39.1	-16.1	Horiz
24	60.718M	54.5	+4.8	+0.1	+1.3	-27.7	-10.0	23.0	39.1	-16.1	Vert
25	78.774M	52.0	+6.9	+0.1	+1.6	-27.7	-10.0	22.9	39.1	-16.2	Vert
26	90.380M	54.3	+8.7	+0.1	+1.6	-27.7	-10.0	27.0	43.5	-16.5	Vert
27	53.824M	52.2	+6.5	+0.1	+1.2	-27.7	-10.0	22.3	39.1	-16.8	Vert
28	62.500M	53.4	+4.9	+0.1	+1.4	-27.7	-10.0	22.1	39.1	-17.0	Vert
29	297.000M	50.4	+12.9	+0.3	+3.2	-27.5	-10.0	29.3	46.4	-17.1	Vert
30	58.305M	52.8	+5.2	+0.1	+1.3	-27.7	-10.0	21.7	39.1	-17.4	Vert
31	923.970M	34.3	+24.9	+0.6	+6.1	-27.1	-10.0	28.8	46.4	-17.6	Vert
32	153.901M	50.2	+10.4	+0.2	+2.2	-27.6	-10.0	25.4	43.5	-18.1	Vert

33	179.700M	51.2	+8.9	+0.2	+2.5	-27.6	-10.0	25.2	43.5	-18.3	Horiz
34	76.554M	50.2	+6.5	+0.1	+1.6	-27.7	-10.0	20.7	39.1	-18.4	Vert
35	362.980M	46.3	+14.9	+0.3	+3.6	-27.5	-10.0	27.6	46.4	-18.8	Vert
36	128.648M	48.9	+11.2	+0.1	+2.0	-27.6	-10.0	24.6	43.5	-18.9	Vert
37	693.000M	37.9	+20.5	+0.5	+5.2	-26.9	-10.0	27.2	46.4	-19.2	Horiz
38	200.020M	50.9	+7.7	+0.2	+2.6	-27.6	-10.0	23.8	43.5	-19.7	Horiz
39	85.370M	47.3	+8.0	+0.1	+1.6	-27.7	-10.0	19.3	39.1	-19.8	Horiz
40	133.448M	47.8	+11.2	+0.1	+2.1	-27.6	-10.0	23.6	43.5	-19.9	Vert
41	172.557M	49.2	+9.2	+0.2	+2.5	-27.6	-10.0	23.5	43.5	-20.0	Vert
42	825.020M	33.9	+23.0	+0.6	+5.7	-26.9	-10.0	26.3	46.4	-20.1	Vert
43	296.970M	47.3	+12.9	+0.3	+3.2	-27.5	-10.0	26.2	46.4	-20.2	Horiz
44	168.332M	48.8	+9.5	+0.2	+2.4	-27.6	-10.0	23.3	43.5	-20.2	Vert
45	480.020M	41.4	+17.5	+0.4	+4.2	-27.7	-10.0	25.8	46.4	-20.6	Horiz
46	296.980M	46.9	+12.9	+0.3	+3.2	-27.5	-10.0	25.8	46.4	-20.6	Horiz
47	976.050M	32.8	+25.6	+0.6	+6.3	-27.0	-10.0	28.3	49.5	-21.2	Vert
48	720.030M	34.7	+21.5	+0.5	+5.3	-26.9	-10.0	25.1	46.4	-21.3	Horiz
49	125.006M	46.3	+11.2	+0.1	+2.0	-27.6	-10.0	22.0	43.5	-21.5	Vert
50	214.070M	47.4	+9.0	+0.2	+2.7	-27.6	-10.0	21.7	43.5	-21.8	Vert
51	155.652M	46.5	+10.3	+0.2	+2.3	-27.6	-10.0	21.7	43.5	-21.8	Vert
52	324.330M	43.8	+13.7	+0.3	+3.4	-27.6	-10.0	23.6	46.4	-22.8	Horiz
53	249.980M	45.8	+12.0	+0.2	+3.0	-27.5	-10.0	23.5	46.4	-22.9	Horiz
54	314.130M	44.0	+13.4	+0.3	+3.3	-27.5	-10.0	23.5	46.4	-22.9	Vert
55	324.950M	43.5	+13.7	+0.3	+3.4	-27.6	-10.0	23.3	46.4	-23.1	Horiz
56	141.220M	44.5	+11.1	+0.2	+2.1	-27.6	-10.0	20.3	43.5	-23.2	Vert
57	326.150M	42.8	+13.8	+0.3	+3.4	-27.6	-10.0	22.7	46.4	-23.7	Horiz

58	279.870M	44.4	+12.6	+0.3	+3.1	-27.7	-10.0	22.7	46.4	-23.7	Vert
59	325.530M	42.8	+13.7	+0.3	+3.4	-27.6	-10.0	22.6	46.4	-23.8	Horiz
60	139.225M	43.7	+11.2	+0.2	+2.1	-27.6	-10.0	19.6	43.5	-23.9	Vert
61	177.368M	45.1	+9.0	+0.2	+2.5	-27.6	-10.0	19.2	43.5	-24.3	Vert
62	123.834M	42.4	+11.2	+0.1	+2.0	-27.6	-10.0	18.1	43.5	-25.4	Vert
63	145.255M	41.1	+10.8	+0.2	+2.2	-27.6	-10.0	16.7	43.5	-26.8	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Alico Systems, Inc.**
Specification: **FCC 15.109 Class A**
Work Order #: **84441** Date: 3/10/2006
Test Type: **Radiated Scan** Time: 16:32:01
Equipment: **Broadband 802.11 B/G/A Access Point and Bridge** Sequence#: 4
Manufacturer: Alico Systems, Inc Tested By: E. Wong
Model: WNE-2419F
S/N:

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Antenna	MTI Wireless Edge	MT-345013	NA
Router Board	Mikrotik	RB/532	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are installed inside the flat panel antenna. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 19dBi. Flatpanel Receiver. Frequency = 2437 MHz. Power level = Idle, receive mode. 110Vac, 60 Hz, 21°C, 43% relative humidity. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 PCB repositioned to mate with mounting hole. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed Passive POE .

Transducer Legend:

T1=Bilog 2451 080107	T2=Cable #10 051606
T3=Cable #15, Site A, 010307	T4=Preamp 8447D 071406

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	50.450M	65.9	+7.6	+0.1	+1.2	-27.7	-10.0	37.1	39.1	-2.0	Vert
2	77.245M QP	66.1	+6.7	+0.1	+1.6	-27.7	-10.0	36.8	39.1	-2.3	Vert
^	77.245M	68.7	+6.7	+0.1	+1.6	-27.7	-10.0	39.4	39.1	+0.3	Vert
4	49.291M	62.9	+8.1	+0.1	+1.2	-27.7	-10.0	34.6	39.1	-4.5	Vert
5	86.060M	61.6	+8.1	+0.1	+1.6	-27.7	-10.0	33.7	39.1	-5.4	Vert
6	51.610M	62.8	+7.2	+0.1	+1.2	-27.7	-10.0	33.6	39.1	-5.5	Vert
7	87.243M	61.0	+8.3	+0.1	+1.6	-27.7	-10.0	33.3	39.1	-5.8	Vert

8	81.743M	61.7	+7.4	+0.1	+1.6	-27.7	-10.0	33.1	39.1	-6.0	Vert
9	87.828M	60.6	+8.4	+0.1	+1.6	-27.7	-10.0	33.0	39.1	-6.1	Vert
10	69.132M	63.7	+5.3	+0.1	+1.5	-27.7	-10.0	32.9	39.1	-6.2	Vert
11 QP	73.205M	62.5	+6.0	+0.1	+1.5	-27.7	-10.0	32.4	39.1	-6.7	Vert
^	73.205M	64.8	+6.0	+0.1	+1.5	-27.7	-10.0	34.7	39.1	-4.4	Vert
13	84.903M	60.1	+7.9	+0.1	+1.6	-27.7	-10.0	32.0	39.1	-7.1	Vert
14	69.127M	62.7	+5.3	+0.1	+1.5	-27.7	-10.0	31.9	39.1	-7.2	Vert
15	85.448M	59.5	+8.0	+0.1	+1.6	-27.7	-10.0	31.5	39.1	-7.6	Vert
16	110.594M	60.6	+10.6	+0.1	+1.9	-27.6	-10.0	35.6	43.5	-7.9	Vert
17 QP	49.800M	59.8	+7.8	+0.1	+1.2	-27.7	-10.0	31.2	39.1	-7.9	Vert
^	49.800M	62.2	+7.8	+0.1	+1.2	-27.7	-10.0	33.6	39.1	-5.5	Vert
19	70.262M	61.5	+5.4	+0.1	+1.5	-27.7	-10.0	30.8	39.1	-8.3	Vert
20	374.995M	55.9	+15.3	+0.3	+3.7	-27.5	-10.0	37.7	46.4	-8.7	Vert
21	37.350M	52.6	+14.3	+0.1	+1.1	-27.7	-10.0	30.4	39.1	-8.7	Vert
22	108.831M	59.6	+10.5	+0.1	+1.9	-27.6	-10.0	34.5	43.5	-9.0	Vert
23	71.447M	60.4	+5.7	+0.1	+1.5	-27.7	-10.0	30.0	39.1	-9.1	Vert
24	84.323M	58.1	+7.8	+0.1	+1.6	-27.7	-10.0	29.9	39.1	-9.2	Vert
25	80.831M	58.7	+7.2	+0.1	+1.6	-27.7	-10.0	29.9	39.1	-9.2	Vert
26	109.994M	59.1	+10.5	+0.1	+1.9	-27.6	-10.0	34.0	43.5	-9.5	Vert
27	79.756M	58.5	+7.1	+0.1	+1.6	-27.7	-10.0	29.6	39.1	-9.5	Vert
28	65.071M	59.9	+5.1	+0.1	+1.4	-27.7	-10.0	28.8	39.1	-10.3	Vert
29	250.028M	58.2	+12.0	+0.2	+3.0	-27.5	-10.0	35.9	46.4	-10.5	Vert
30	106.725M	58.3	+10.3	+0.1	+1.9	-27.6	-10.0	33.0	43.5	-10.5	Vert
31	35.033M	49.8	+15.4	+0.1	+1.0	-27.7	-10.0	28.6	39.1	-10.5	Vert
32	692.970M	45.3	+20.5	+0.5	+5.2	-26.9	-10.0	34.6	46.4	-11.8	Vert

33	48.144M	55.0	+8.7	+0.1	+1.2	-27.7	-10.0	27.3	39.1	-11.8	Vert
34	112.851M	56.1	+10.7	+0.1	+1.9	-27.6	-10.0	31.2	43.5	-12.3	Vert
35	57.474M	57.6	+5.4	+0.1	+1.3	-27.7	-10.0	26.7	39.1	-12.4	Vert
36	60.386M	58.2	+4.7	+0.1	+1.3	-27.7	-10.0	26.6	39.1	-12.5	Vert
37	88.856M	58.4	+8.5	+0.1	+1.6	-27.7	-10.0	30.9	43.5	-12.6	Vert
38	164.995M	55.9	+9.8	+0.2	+2.4	-27.6	-10.0	30.7	43.5	-12.8	Vert
39	65.634M	57.3	+5.1	+0.1	+1.4	-27.7	-10.0	26.2	39.1	-12.9	Vert
40	108.223M	55.6	+10.4	+0.1	+1.9	-27.6	-10.0	30.4	43.5	-13.1	Vert
41	46.085M	52.4	+9.8	+0.1	+1.2	-27.7	-10.0	25.8	39.1	-13.3	Vert
42	42.577M	50.8	+11.5	+0.1	+1.1	-27.7	-10.0	25.8	39.1	-13.3	Vert
43	375.010M	51.2	+15.3	+0.3	+3.7	-27.5	-10.0	33.0	46.4	-13.4	Horiz
44	91.861M	56.9	+8.9	+0.1	+1.6	-27.7	-10.0	29.8	43.5	-13.7	Vert
45	46.669M	52.3	+9.4	+0.1	+1.2	-27.7	-10.0	25.3	39.1	-13.8	Vert
46	59.222M	56.2	+4.9	+0.1	+1.3	-27.7	-10.0	24.8	39.1	-14.3	Vert
47	44.382M	50.4	+10.6	+0.1	+1.1	-27.7	-10.0	24.5	39.1	-14.6	Vert
48	104.678M	54.0	+10.2	+0.1	+1.8	-27.6	-10.0	28.5	43.5	-15.0	Vert
49	112.868M	53.3	+10.7	+0.1	+1.9	-27.6	-10.0	28.4	43.5	-15.1	Vert
50	197.997M	55.0	+7.8	+0.2	+2.6	-27.6	-10.0	28.0	43.5	-15.5	Vert
51	528.010M	43.8	+19.5	+0.5	+4.4	-27.7	-10.0	30.5	46.4	-15.9	Horiz
52	500.020M	45.0	+18.0	+0.4	+4.3	-27.6	-10.0	30.1	46.4	-16.3	Vert
53	99.120M	53.1	+9.8	+0.1	+1.8	-27.6	-10.0	27.2	43.5	-16.3	Vert
54	109.728M	52.0	+10.5	+0.1	+1.9	-27.6	-10.0	26.9	43.5	-16.6	Vert
55	49.923M	51.0	+7.7	+0.1	+1.2	-27.7	-10.0	22.3	39.1	-16.8	Horiz
56	125.050M	50.3	+11.2	+0.1	+2.0	-27.6	-10.0	26.0	43.5	-17.5	Horiz
57	227.040M	52.9	+10.1	+0.2	+2.7	-27.6	-10.0	28.3	46.4	-18.1	Vert

58	100.661M	51.1	+9.9	+0.1	+1.8	-27.6	-10.0	25.3	43.5	-18.2	Vert
59	143.292M	49.5	+11.0	+0.2	+2.1	-27.6	-10.0	25.2	43.5	-18.3	Vert
60	250.010M	50.1	+12.0	+0.2	+3.0	-27.5	-10.0	27.8	46.4	-18.6	Horiz
61	199.991M	52.0	+7.7	+0.2	+2.6	-27.6	-10.0	24.9	43.5	-18.6	Vert
62	63.305M	51.8	+4.9	+0.1	+1.4	-27.7	-10.0	20.5	39.1	-18.6	Vert
63	56.268M	50.8	+5.8	+0.1	+1.3	-27.7	-10.0	20.3	39.1	-18.8	Vert
64	124.978M	48.6	+11.2	+0.1	+2.0	-27.6	-10.0	24.3	43.5	-19.2	Vert
65	330.020M	47.0	+13.9	+0.3	+3.4	-27.6	-10.0	27.0	46.4	-19.4	Vert
66	79.996M	48.5	+7.1	+0.1	+1.6	-27.7	-10.0	19.6	39.1	-19.5	Horiz
67	153.797M	48.7	+10.4	+0.2	+2.2	-27.6	-10.0	23.9	43.5	-19.6	Vert
68	125.778M	48.2	+11.2	+0.1	+2.0	-27.6	-10.0	23.9	43.5	-19.6	Vert
69	268.300M	48.5	+12.4	+0.3	+3.1	-27.6	-10.0	26.7	46.4	-19.7	Vert
70	512.020M	40.6	+18.7	+0.4	+4.3	-27.6	-10.0	26.4	46.4	-20.0	Vert
71	154.961M	48.3	+10.3	+0.2	+2.3	-27.6	-10.0	23.5	43.5	-20.0	Vert
72	268.280M	47.8	+12.4	+0.3	+3.1	-27.6	-10.0	26.0	46.4	-20.4	Vert
73	330.040M	45.9	+13.9	+0.3	+3.4	-27.6	-10.0	25.9	46.4	-20.5	Horiz
74	69.636M	49.3	+5.4	+0.1	+1.5	-27.7	-10.0	18.6	39.1	-20.5	Horiz
75	126.952M	47.2	+11.2	+0.1	+2.0	-27.6	-10.0	22.9	43.5	-20.6	Vert
76	146.196M	47.1	+10.8	+0.2	+2.2	-27.6	-10.0	22.7	43.5	-20.8	Vert
77	195.521M	49.4	+8.0	+0.2	+2.6	-27.6	-10.0	22.6	43.5	-20.9	Vert
78	144.435M	46.8	+10.9	+0.2	+2.2	-27.6	-10.0	22.5	43.5	-21.0	Vert
79	133.054M	46.7	+11.2	+0.1	+2.1	-27.6	-10.0	22.5	43.5	-21.0	Vert
80	87.272M	45.6	+8.3	+0.1	+1.6	-27.7	-10.0	17.9	39.1	-21.2	Horiz
81	194.358M	49.0	+8.0	+0.2	+2.6	-27.6	-10.0	22.2	43.5	-21.3	Vert
82	480.030M	40.2	+17.5	+0.4	+4.2	-27.7	-10.0	24.6	46.4	-21.8	Horiz

83	132.486M	45.8	+11.2	+0.1	+2.1	-27.6	-10.0	21.6	43.5	-21.9	Vert
84	53.430M	46.7	+6.6	+0.1	+1.2	-27.7	-10.0	16.9	39.1	-22.2	Horiz
85	149.681M	46.0	+10.5	+0.2	+2.2	-27.6	-10.0	21.3	43.5	-22.2	Vert
86	234.330M	47.9	+10.8	+0.2	+2.8	-27.6	-10.0	24.1	46.4	-22.3	Vert
87	960.080M	31.1	+25.8	+0.6	+6.2	-27.0	-10.0	26.7	49.5	-22.8	Horiz
88	303.570M	44.2	+13.1	+0.3	+3.2	-27.5	-10.0	23.3	46.4	-23.1	Vert
89	138.432M	44.5	+11.2	+0.2	+2.1	-27.6	-10.0	20.4	43.5	-23.1	Vert
90	197.990M	47.0	+7.8	+0.2	+2.6	-27.6	-10.0	20.0	43.5	-23.5	Horiz
91	110.034M	45.1	+10.5	+0.1	+1.9	-27.6	-10.0	20.0	43.5	-23.5	Horiz
92	108.311M	45.2	+10.4	+0.1	+1.9	-27.6	-10.0	20.0	43.5	-23.5	Horiz
93	159.657M	44.8	+10.2	+0.2	+2.3	-27.6	-10.0	19.9	43.5	-23.6	Vert
94	110.605M	44.8	+10.6	+0.1	+1.9	-27.6	-10.0	19.8	43.5	-23.7	Horiz
95	51.081M	44.4	+7.3	+0.1	+1.2	-27.7	-10.0	15.3	39.1	-23.8	Horiz
96	157.298M	43.8	+10.3	+0.2	+2.3	-27.6	-10.0	19.0	43.5	-24.5	Vert
97	420.060M	38.9	+16.4	+0.3	+3.8	-27.6	-10.0	21.8	46.4	-24.6	Horiz
98	479.980M	37.4	+17.5	+0.4	+4.2	-27.7	-10.0	21.8	46.4	-24.6	Vert
99	429.000M	38.5	+16.5	+0.3	+3.9	-27.6	-10.0	21.6	46.4	-24.8	Vert
100	36.796M	36.2	+14.6	+0.1	+1.0	-27.7	-10.0	14.2	39.1	-24.9	Horiz
101	201.970M	45.5	+7.9	+0.2	+2.6	-27.6	-10.0	18.6	43.5	-24.9	Vert
102	400.000M	38.7	+16.1	+0.3	+3.7	-27.4	-10.0	21.4	46.4	-25.0	Horiz
103	140.948M	42.7	+11.1	+0.2	+2.1	-27.6	-10.0	18.5	43.5	-25.0	Vert
104	170.731M	43.5	+9.3	+0.2	+2.5	-27.6	-10.0	17.9	43.5	-25.6	Vert
105	176.552M	43.7	+9.0	+0.2	+2.5	-27.6	-10.0	17.8	43.5	-25.7	Vert
106	191.990M	44.0	+8.2	+0.2	+2.6	-27.6	-10.0	17.4	43.5	-26.1	Horiz
107	68.559M	43.7	+5.3	+0.1	+1.5	-27.7	-10.0	12.9	39.1	-26.2	Horiz

108	114.138M	41.7	+10.8	+0.1	+1.9	-27.6	-10.0	16.9	43.5	-26.6	Horiz
109	349.970M	39.1	+14.4	+0.3	+3.6	-27.6	-10.0	19.8	46.4	-26.6	Vert
110	350.020M	39.0	+14.4	+0.3	+3.6	-27.6	-10.0	19.7	46.4	-26.7	Horiz
111	204.868M	43.3	+8.2	+0.2	+2.6	-27.6	-10.0	16.7	43.5	-26.8	Vert
112	45.814M	38.6	+9.9	+0.1	+1.2	-27.7	-10.0	12.1	39.1	-27.0	Horiz
113	336.020M	39.2	+14.0	+0.3	+3.5	-27.6	-10.0	19.4	46.4	-27.0	Vert
114	65.079M	43.1	+5.1	+0.1	+1.4	-27.7	-10.0	12.0	39.1	-27.1	Horiz
115	304.180M	39.2	+13.1	+0.3	+3.2	-27.5	-10.0	18.3	46.4	-28.1	Horiz
116	181.235M	40.9	+8.8	+0.2	+2.5	-27.6	-10.0	14.8	43.5	-28.7	Vert
117	62.757M	41.4	+4.9	+0.1	+1.4	-27.7	-10.0	10.1	39.1	-29.0	Horiz
118	61.599M	40.8	+4.8	+0.1	+1.3	-27.7	-10.0	9.3	39.1	-29.8	Horiz
119	193.163M	39.9	+8.1	+0.2	+2.6	-27.6	-10.0	13.2	43.5	-30.3	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.109 Class A**		
Work Order #:	**84441**	Date:	3/10/2006
Test Type:	**Radiated Scan**	Time:	14:11:59
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	6
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Router Board	Mikrotik	RB/532	NA
Antenna	HyperLink Technologies	HG2420P-120	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in enclosure, mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi Sector. Frequency = 2437 MHz. Power level = Idle, receive mode. 110Vac, 60 Hz, 21°C, 43% relative humidity. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE Bandpass filter: Anatech Microwave MN: AB1694m SN 05 Installed.

Transducer Legend:

T1=Bilog 2451 080107	T2=Cable #10 051606
T3=Cable #15, Site A, 010307	T4=Preamp 8447D 071406

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	36.150M QP	58.4	+14.9	+0.1	+1.0	-27.7	-10.0	36.7	39.1	-2.4	Vert
^	36.150M	58.5	+14.9	+0.1	+1.0	-27.7	-10.0	36.8	39.1	-2.3	Vert
3	37.891M	57.6	+14.0	+0.1	+1.1	-27.7	-10.0	35.1	39.1	-4.0	Vert
4	42.026M	59.6	+11.8	+0.1	+1.1	-27.7	-10.0	34.9	39.1	-4.2	Vert
5	132.263M	63.2	+11.2	+0.1	+2.1	-27.6	-10.0	39.0	43.5	-4.5	Vert
6	132.280M	62.0	+11.2	+0.1	+2.1	-27.6	-10.0	37.8	43.5	-5.7	Vert
7	73.108M	63.5	+6.0	+0.1	+1.5	-27.7	-10.0	33.4	39.1	-5.7	Vert

8	76.625M	62.6	+6.6	+0.1	+1.6	-27.7	-10.0	33.2	39.1	-5.9	Vert
9	249.996M	61.8	+12.0	+0.2	+3.0	-27.5	-10.0	39.5	46.4	-6.9	Vert
10	46.155M	58.8	+9.7	+0.1	+1.2	-27.7	-10.0	32.1	39.1	-7.0	Vert
11	46.771M	58.5	+9.4	+0.1	+1.2	-27.7	-10.0	31.5	39.1	-7.6	Vert
12	39.674M	54.6	+13.1	+0.1	+1.1	-27.7	-10.0	31.2	39.1	-7.9	Vert
13	74.292M	60.9	+6.2	+0.1	+1.5	-27.7	-10.0	31.0	39.1	-8.1	Vert
14	43.195M	56.1	+11.2	+0.1	+1.1	-27.7	-10.0	30.8	39.1	-8.3	Vert
15	45.004M	56.3	+10.3	+0.1	+1.2	-27.7	-10.0	30.2	39.1	-8.9	Vert
16	86.402M	58.0	+8.1	+0.1	+1.6	-27.7	-10.0	30.1	39.1	-9.0	Vert
17	64.198M	60.8	+5.0	+0.1	+1.4	-27.7	-10.0	29.6	39.1	-9.5	Vert
18	374.980M	54.6	+15.3	+0.3	+3.7	-27.5	-10.0	36.4	46.4	-10.0	Vert
19	230.996M	60.4	+10.5	+0.2	+2.8	-27.6	-10.0	36.3	46.4	-10.1	Vert
20	197.680M	60.4	+7.8	+0.2	+2.6	-27.6	-10.0	33.4	43.5	-10.1	Vert
21	64.810M	60.1	+5.1	+0.1	+1.4	-27.7	-10.0	29.0	39.1	-10.1	Vert
22	44.359M	54.4	+10.6	+0.1	+1.1	-27.7	-10.0	28.5	39.1	-10.6	Vert
23	197.080M	59.6	+7.9	+0.2	+2.6	-27.6	-10.0	32.7	43.5	-10.8	Vert
24	40.880M	52.3	+12.4	+0.1	+1.1	-27.7	-10.0	28.2	39.1	-10.9	Vert
25	297.000M	56.5	+12.9	+0.3	+3.2	-27.5	-10.0	35.4	46.4	-11.0	Vert
26	375.000M	53.5	+15.3	+0.3	+3.7	-27.5	-10.0	35.3	46.4	-11.1	Horiz
27	791.980M	43.5	+22.2	+0.6	+5.6	-26.9	-10.0	35.0	46.4	-11.4	Horiz
28	129.931M	56.2	+11.2	+0.1	+2.0	-27.6	-10.0	31.9	43.5	-11.6	Vert
29	215.700M	57.1	+9.2	+0.2	+2.7	-27.6	-10.0	31.6	43.5	-11.9	Vert
30	82.570M	55.5	+7.5	+0.1	+1.6	-27.7	-10.0	27.0	39.1	-12.1	Vert
31	68.351M	57.8	+5.3	+0.1	+1.5	-27.7	-10.0	27.0	39.1	-12.1	Vert
32	132.230M	55.0	+11.2	+0.1	+2.1	-27.6	-10.0	30.8	43.5	-12.7	Horiz

33	128.776M	55.1	+11.2	+0.1	+2.0	-27.6	-10.0	30.8	43.5	-12.7	Vert
34	693.000M	44.0	+20.5	+0.5	+5.2	-26.9	-10.0	33.3	46.4	-13.1	Horiz
35	132.230M	53.6	+11.2	+0.1	+2.1	-27.6	-10.0	29.4	43.5	-14.1	Horiz
36	692.996M	42.8	+20.5	+0.5	+5.2	-26.9	-10.0	32.1	46.4	-14.3	Vert
37	48.523M	52.3	+8.5	+0.1	+1.2	-27.7	-10.0	24.4	39.1	-14.7	Vert
38	209.860M	54.9	+8.6	+0.2	+2.6	-27.6	-10.0	28.7	43.5	-14.8	Vert
39	79.625M	53.0	+7.0	+0.1	+1.6	-27.7	-10.0	24.0	39.1	-15.1	Vert
40	63.027M	55.2	+4.9	+0.1	+1.4	-27.7	-10.0	23.9	39.1	-15.2	Vert
41	68.950M	54.4	+5.3	+0.1	+1.5	-27.7	-10.0	23.6	39.1	-15.5	Vert
42	52.075M	53.0	+7.0	+0.1	+1.2	-27.7	-10.0	23.6	39.1	-15.5	Vert
43	56.247M	53.8	+5.8	+0.1	+1.3	-27.7	-10.0	23.3	39.1	-15.8	Vert
44	725.980M	39.7	+21.8	+0.5	+5.3	-26.8	-10.0	30.5	46.4	-15.9	Horiz
45	164.980M	52.6	+9.8	+0.2	+2.4	-27.6	-10.0	27.4	43.5	-16.1	Vert
46	215.700M	52.5	+9.2	+0.2	+2.7	-27.6	-10.0	27.0	43.5	-16.5	Horiz
47	461.980M	46.0	+17.1	+0.3	+4.1	-27.8	-10.0	29.7	46.4	-16.7	Horiz
48	231.000M	53.1	+10.5	+0.2	+2.8	-27.6	-10.0	29.0	46.4	-17.4	Horiz
49	123.398M	50.3	+11.2	+0.1	+2.0	-27.6	-10.0	26.0	43.5	-17.5	Vert
50	428.980M	45.5	+16.5	+0.3	+3.9	-27.6	-10.0	28.6	46.4	-17.8	Horiz
51	395.980M	45.8	+16.0	+0.3	+3.7	-27.4	-10.0	28.4	46.4	-18.0	Horiz
52	36.130M	42.8	+14.9	+0.1	+1.0	-27.7	-10.0	21.1	39.1	-18.0	Horiz
53	154.171M	50.1	+10.4	+0.2	+2.3	-27.6	-10.0	25.4	43.5	-18.1	Vert
54	111.544M	50.2	+10.6	+0.1	+1.9	-27.6	-10.0	25.2	43.5	-18.3	Vert
55	100.662M	51.0	+9.9	+0.1	+1.8	-27.6	-10.0	25.2	43.5	-18.3	Vert
56	54.435M	50.8	+6.3	+0.1	+1.2	-27.7	-10.0	20.7	39.1	-18.4	Vert
57	736.053M	36.7	+22.2	+0.5	+5.3	-26.8	-10.0	27.9	46.4	-18.5	Vert

58	660.020M	39.1	+20.3	+0.5	+5.0	-27.1	-10.0	27.8	46.4	-18.6	Horiz
59	195.850M	51.5	+7.9	+0.2	+2.6	-27.6	-10.0	24.6	43.5	-18.9	Horiz
60	153.610M	49.3	+10.4	+0.2	+2.2	-27.6	-10.0	24.5	43.5	-19.0	Vert
61	446.080M	44.1	+16.7	+0.3	+4.0	-27.8	-10.0	27.3	46.4	-19.1	Vert
62	124.566M	48.7	+11.2	+0.1	+2.0	-27.6	-10.0	24.4	43.5	-19.1	Vert
63	220.730M	52.3	+9.6	+0.2	+2.7	-27.6	-10.0	27.2	46.4	-19.2	Vert
64	154.460M	49.0	+10.4	+0.2	+2.3	-27.6	-10.0	24.3	43.5	-19.2	Vert
65	250.020M	49.2	+12.0	+0.2	+3.0	-27.5	-10.0	26.9	46.4	-19.5	Horiz
66	768.030M	35.1	+22.5	+0.5	+5.5	-26.8	-10.0	26.8	46.4	-19.6	Horiz
67	327.870M	46.9	+13.8	+0.3	+3.4	-27.6	-10.0	26.8	46.4	-19.6	Horiz
68	297.000M	47.7	+12.9	+0.3	+3.2	-27.5	-10.0	26.6	46.4	-19.8	Horiz
69	300.010M	47.1	+13.0	+0.3	+3.2	-27.5	-10.0	26.1	46.4	-20.3	Vert
70	171.946M	48.8	+9.2	+0.2	+2.5	-27.6	-10.0	23.1	43.5	-20.4	Vert
71	212.500M	48.8	+8.9	+0.2	+2.7	-27.6	-10.0	23.0	43.5	-20.5	Horiz
72	832.030M	33.0	+23.3	+0.6	+5.7	-26.9	-10.0	25.7	46.4	-20.7	Horiz
73	479.980M	40.5	+17.5	+0.4	+4.2	-27.7	-10.0	24.9	46.4	-21.5	Horiz
74	112.134M	46.9	+10.7	+0.1	+1.9	-27.6	-10.0	22.0	43.5	-21.5	Vert
75	480.000M	39.7	+17.5	+0.4	+4.2	-27.7	-10.0	24.1	46.4	-22.3	Vert
76	500.050M	38.6	+18.0	+0.4	+4.3	-27.6	-10.0	23.7	46.4	-22.7	Horiz
77	363.010M	42.4	+14.9	+0.3	+3.6	-27.5	-10.0	23.7	46.4	-22.7	Vert
78	330.000M	43.0	+13.9	+0.3	+3.4	-27.6	-10.0	23.0	46.4	-23.4	Vert
79	271.030M	44.8	+12.4	+0.3	+3.1	-27.7	-10.0	22.9	46.4	-23.5	Vert
80	263.980M	44.7	+12.3	+0.3	+3.1	-27.6	-10.0	22.8	46.4	-23.6	Horiz
81	416.030M	39.8	+16.3	+0.3	+3.8	-27.5	-10.0	22.7	46.4	-23.7	Vert
82	429.010M	39.5	+16.5	+0.3	+3.9	-27.6	-10.0	22.6	46.4	-23.8	Vert

83	287.620M	42.9	+12.8	+0.3	+3.2	-27.6	-10.0	21.6	46.4	-24.8	Horiz
84	440.280M	38.3	+16.7	+0.3	+3.9	-27.7	-10.0	21.5	46.4	-24.9	Horiz
85	269.850M	43.2	+12.4	+0.3	+3.1	-27.7	-10.0	21.3	46.4	-25.1	Horiz
86	349.970M	39.3	+14.4	+0.3	+3.6	-27.6	-10.0	20.0	46.4	-26.4	Horiz
87	413.620M	34.5	+16.3	+0.3	+3.8	-27.5	-10.0	17.4	46.4	-29.0	Horiz
88	351.500M	36.4	+14.5	+0.3	+3.6	-27.6	-10.0	17.2	46.4	-29.2	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**84441**	Date:	3/14/2006
Test Type:	**Conducted Emissions**	Time:	08:23:31
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	6
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2407M		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Router Board	Mikrotik	RB/532	NA
Antenna	Pacific Wireless	MA24-7	NA
Power Supply	AULT Inc	PW118	NA
Radio Card	Ubiquiti Networks	Super Range 2	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi Omni Receiver. Frequency = 2437 MHz. Mode: Tx 110Vac, 60 Hz, 21°C, 43% relative humidity. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 PCB repositioned to mate with mounting hole. Passive POE Enclosure: Hammond R191-170-000 Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

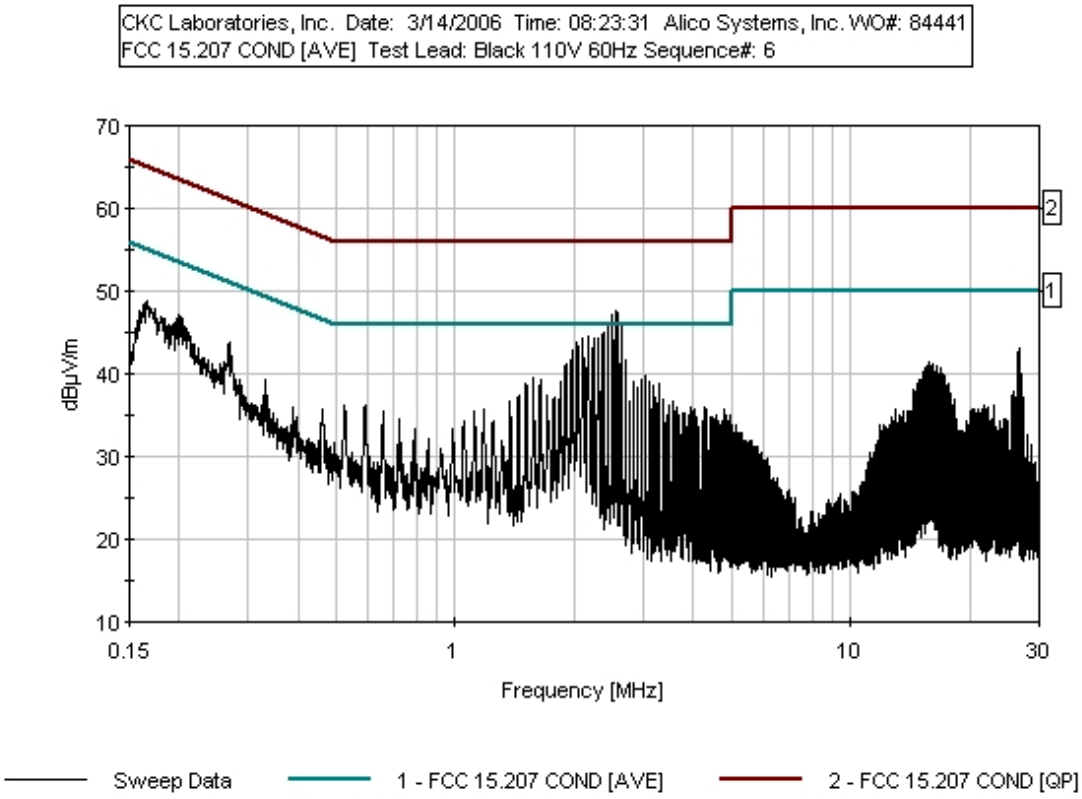
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2.166M	38.6	+0.1	+5.8	+0.1	+0.0	+0.0	44.6	46.0	-1.4	Black
2	2.234M	38.4	+0.1	+5.8	+0.1	+0.0	+0.0	44.4	46.0	-1.6	Black
3	2.298M	38.2	+0.1	+5.8	+0.2	+0.1	+0.0	44.4	46.0	-1.6	Black
4	2.102M	38.3	+0.1	+5.8	+0.1	+0.0	+0.0	44.3	46.0	-1.7	Black
5	2.034M	37.8	+0.1	+5.8	+0.1	+0.0	+0.0	43.8	46.0	-2.2	Black
6	1.970M	36.8	+0.1	+5.8	+0.1	+0.0	+0.0	42.8	46.0	-3.2	Black

7	2.497M Ave	35.4	+0.1	+5.8	+0.2	+0.1	+0.0	41.6	46.0	-4.4	Black
^	2.497M	41.0	+0.1	+5.8	+0.2	+0.1	+0.0	47.2	46.0	+1.2	Black
9	2.697M	35.4	+0.1	+5.8	+0.2	+0.1	+0.0	41.6	46.0	-4.4	Black
10	1.906M	35.1	+0.1	+5.8	+0.1	+0.0	+0.0	41.1	46.0	-4.9	Black
11	2.629M Ave	34.1	+0.1	+5.8	+0.2	+0.1	+0.0	40.3	46.0	-5.7	Black
^	2.629M	39.6	+0.1	+5.8	+0.2	+0.1	+0.0	45.8	46.0	-0.2	Black
13	2.561M Ave	34.0	+0.1	+5.8	+0.2	+0.1	+0.0	40.2	46.0	-5.8	Black
^	2.561M	41.4	+0.1	+5.8	+0.2	+0.1	+0.0	47.6	46.0	+1.6	Black
15	3.025M	33.5	+0.1	+5.8	+0.2	+0.1	+0.0	39.7	46.0	-6.3	Black
16	2.434M Ave	33.4	+0.1	+5.8	+0.2	+0.1	+0.0	39.6	46.0	-6.4	Black
^	2.434M	40.0	+0.1	+5.8	+0.2	+0.1	+0.0	46.2	46.0	+0.2	Black
18	166.726k	42.3	+0.5	+5.8	+0.0	+0.1	+0.0	48.7	55.1	-6.4	Black
19	2.366M Ave	33.1	+0.1	+5.8	+0.2	+0.1	+0.0	39.3	46.0	-6.7	Black
^	2.366M	38.7	+0.1	+5.8	+0.2	+0.1	+0.0	44.9	46.0	-1.1	Black


CKC Laboratories, Inc. Date: 3/14/2006 Time: 08:23:31 Alico Systems, Inc. WO#: 84441
FCC 15.207 COND [AVE] Test Lead: Black 110V 60Hz Sequence#: 6
70
60
50
40
30
20
10
dBµV/m
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 COND [AVE]
2 - FCC 15.207 COND [QP]

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**84441**	Date:	3/14/2006
Test Type:	**Conducted Emissions**	Time:	08:31:58
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	7
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2407M		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Router Board	Mikrotik	RB/532	NA
Antenna	Pacific Wireless	MA24-7	NA
Power Supply	AULT Inc	PW118	NA
Radio Card	Ubiquiti Networks	Super Range 2	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi Omni Receiver. Frequency = 2437 MHz. Mode: Tx 110Vac, 60 Hz, 21°C, 43% relative humidity. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 PCB repositioned to mate with mounting hole. Passive POE Enclosure: Hammond R191-170-000 .Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

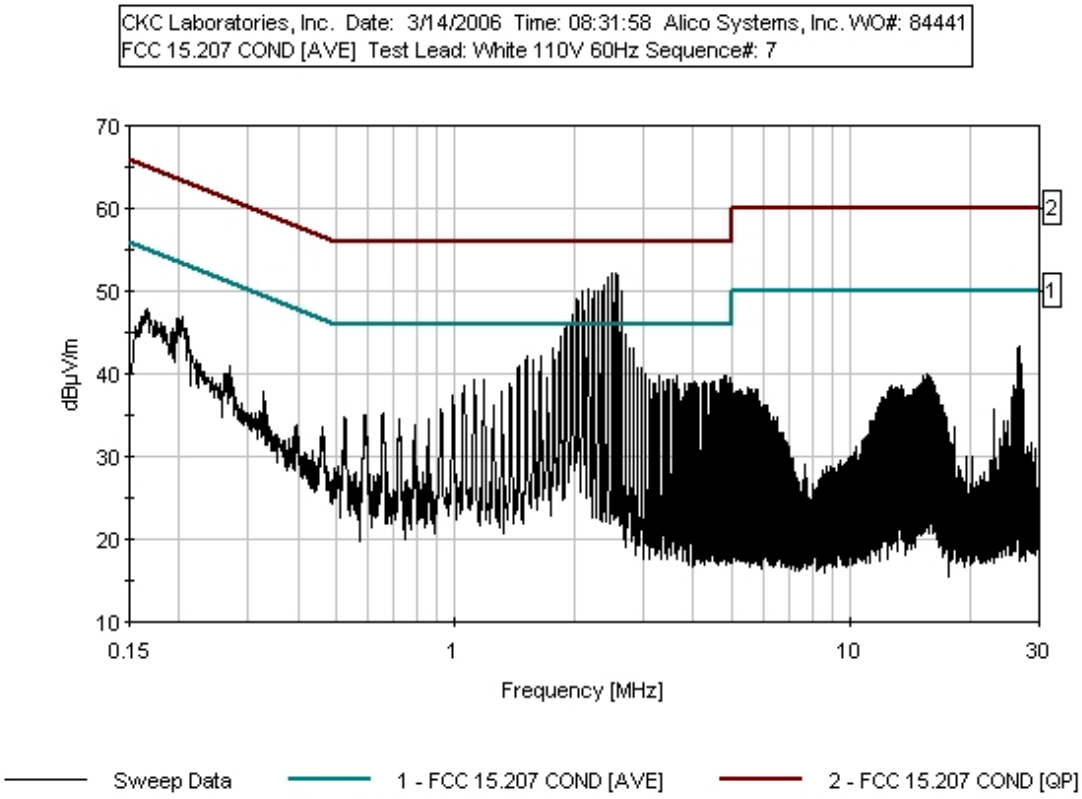
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2.497M Ave	39.5	+0.1	+5.8	+0.2	+0.1	+0.0	45.7	46.0	-0.3	White
^	2.497M	46.0	+0.1	+5.8	+0.2	+0.1	+0.0	52.2	46.0	+6.2	White
3	2.564M Ave	39.1	+0.1	+5.8	+0.2	+0.1	+0.0	45.3	46.0	-0.7	White
^	2.564M	46.0	+0.1	+5.8	+0.2	+0.1	+0.0	52.2	46.0	+6.2	White
5	2.693M	38.6	+0.1	+5.8	+0.2	+0.1	+0.0	44.8	46.0	-1.2	White
6	1.843M	38.6	+0.1	+5.8	+0.1	+0.0	+0.0	44.6	46.0	-1.4	White

7	2.434M Ave	38.0	+0.1	+5.8	+0.2	+0.1	+0.0	44.2	46.0	-1.8	White
^	2.434M	45.4	+0.1	+5.8	+0.2	+0.1	+0.0	51.6	46.0	+5.6	White
9	2.170M Ave	37.7	+0.1	+5.8	+0.1	+0.0	+0.0	43.7	46.0	-2.3	White
^	2.170M	44.2	+0.1	+5.8	+0.1	+0.0	+0.0	50.2	46.0	+4.2	White
11	2.366M Ave	37.1	+0.1	+5.8	+0.2	+0.1	+0.0	43.3	46.0	-2.7	White
^	2.366M	44.4	+0.1	+5.8	+0.2	+0.1	+0.0	50.6	46.0	+4.6	White
13	2.039M Ave	37.2	+0.1	+5.8	+0.1	+0.0	+0.0	43.2	46.0	-2.8	White
^	2.039M	43.0	+0.1	+5.8	+0.1	+0.0	+0.0	49.0	46.0	+3.0	White
15	1.775M	37.2	+0.1	+5.8	+0.1	+0.0	+0.0	43.2	46.0	-2.8	White
16	2.302M Ave	36.9	+0.1	+5.8	+0.2	+0.1	+0.0	43.1	46.0	-2.9	White
^	2.302M	43.8	+0.1	+5.8	+0.2	+0.1	+0.0	50.0	46.0	+4.0	White
18	2.629M Ave	36.8	+0.1	+5.8	+0.2	+0.1	+0.0	43.0	46.0	-3.0	White
^	2.629M	43.7	+0.1	+5.8	+0.2	+0.1	+0.0	49.9	46.0	+3.9	White
20	2.102M Ave	36.9	+0.1	+5.8	+0.1	+0.0	+0.0	42.9	46.0	-3.1	White
^	2.102M	43.9	+0.1	+5.8	+0.1	+0.0	+0.0	49.9	46.0	+3.9	White
22	1.906M Ave	36.0	+0.1	+5.8	+0.1	+0.0	+0.0	42.0	46.0	-4.0	White
^	1.906M	40.3	+0.1	+5.8	+0.1	+0.0	+0.0	46.3	46.0	+0.3	White
24	1.970M Ave	35.7	+0.1	+5.8	+0.1	+0.0	+0.0	41.7	46.0	-4.3	White
^	1.970M	41.2	+0.1	+5.8	+0.1	+0.0	+0.0	47.2	46.0	+1.2	White
26	2.238M Ave	34.9	+0.1	+5.8	+0.2	+0.1	+0.0	41.1	46.0	-4.9	White
^	2.238M	43.9	+0.1	+5.8	+0.2	+0.1	+0.0	50.1	46.0	+4.1	White


CKC Laboratories, Inc. Date: 3/14/2006 Time: 08:31:58 Alico Systems, Inc. WO#: 84441
FCC 15.207 COND [AVE] Test Lead: White 110V 60Hz Sequence#: 7
70
60
50
40
30
20
10
dBµV/m
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 COND [AVE]
2 - FCC 15.207 COND [QP]

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	15:47:18
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	5
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2419F		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Antenna	MTI Wireless Edge	MT-345013	NA
Router Board	Mikrotik	RB/532	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are installed inside the flat panel antenna. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 19 dBi. Frequency = 2437 MHz. Mode = TX. 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 18" in length, 16 gauge Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

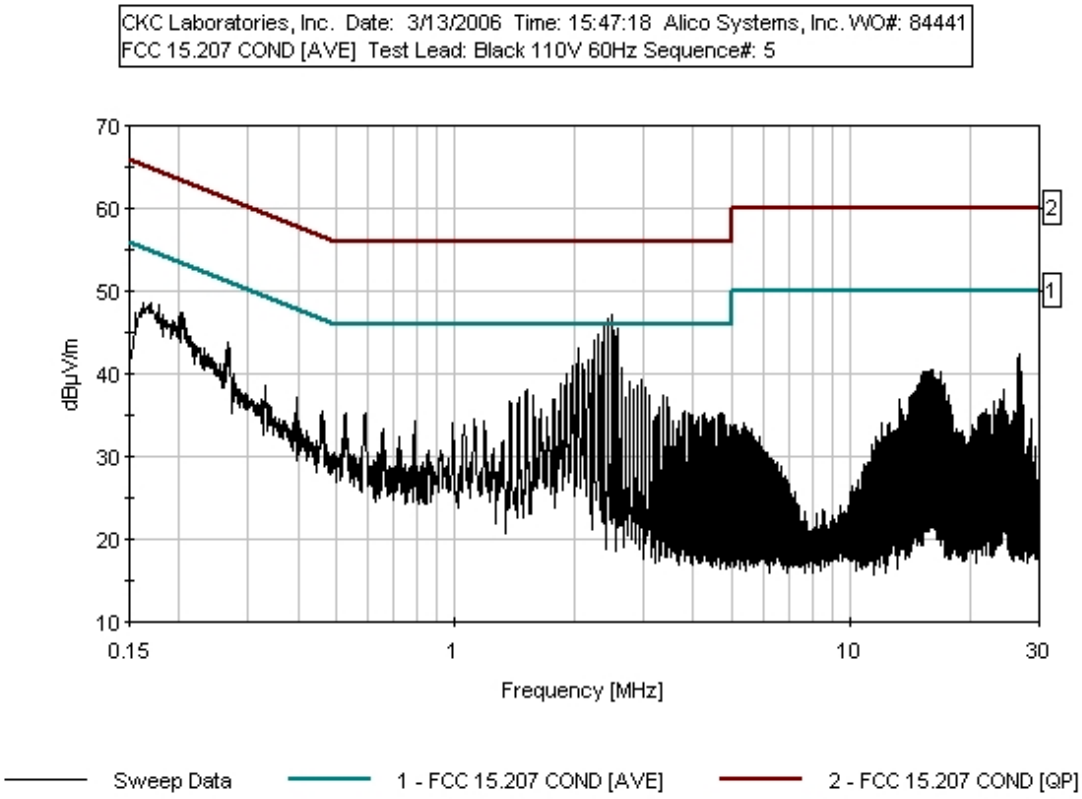
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2.302M	38.5	+0.1	+5.8	+0.2	+0.1	+0.0	44.7	46.0	-1.3	Black
2	2.234M	38.0	+0.1	+5.8	+0.1	+0.0	+0.0	44.0	46.0	-2.0	Black
3	2.038M	37.1	+0.1	+5.8	+0.1	+0.0	+0.0	43.1	46.0	-2.9	Black
4	2.170M	35.6	+0.1	+5.8	+0.1	+0.0	+0.0	41.6	46.0	-4.4	Black
5 Ave	2.434M	35.0	+0.1	+5.8	+0.2	+0.1	+0.0	41.2	46.0	-4.8	Black
^	2.434M	40.5	+0.1	+5.8	+0.2	+0.1	+0.0	46.7	46.0	+0.7	Black

7	2.102M	35.1	+0.1	+5.8	+0.1	+0.0	+0.0	41.1	46.0	-4.9	Black
8	1.974M	34.9	+0.1	+5.8	+0.1	+0.0	+0.0	40.9	46.0	-5.1	Black
9	2.502M Ave	34.5	+0.1	+5.8	+0.2	+0.1	+0.0	40.7	46.0	-5.3	Black
^	2.502M	40.9	+0.1	+5.8	+0.2	+0.1	+0.0	47.1	46.0	+1.1	Black
11	2.629M	34.4	+0.1	+5.8	+0.2	+0.1	+0.0	40.6	46.0	-5.4	Black
12	2.370M Ave	33.8	+0.1	+5.8	+0.2	+0.1	+0.0	40.0	46.0	-6.0	Black
^	2.370M	39.8	+0.1	+5.8	+0.2	+0.1	+0.0	46.0	46.0	+0.0	Black
14	201.632k	41.5	+0.2	+5.8	+0.0	+0.0	+0.0	47.5	53.5	-6.0	Black
15	1.911M	34.0	+0.1	+5.8	+0.1	+0.0	+0.0	40.0	46.0	-6.0	Black
16	203.813k	41.4	+0.2	+5.8	+0.0	+0.0	+0.0	47.4	53.5	-6.1	Black
17	2.566M Ave	33.2	+0.1	+5.8	+0.2	+0.1	+0.0	39.4	46.0	-6.6	Black
^	2.566M	39.2	+0.1	+5.8	+0.2	+0.1	+0.0	45.4	46.0	-0.6	Black
19	2.961M	33.0	+0.1	+5.8	+0.2	+0.1	+0.0	39.2	46.0	-6.8	Black


CKC Laboratories, Inc. Date: 3/13/2006 Time: 15:47:18 Alico Systems, Inc. WO#: 84441
FCC 15.207 COND [AVE] Test Lead: Black 110V 60Hz Sequence#: 5
70
60
50
40
30
20
10
dBµV/m
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 COND [AVE]
2 - FCC 15.207 COND [QP]

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	15:57:01
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	6
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2419F		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Router Board	Mikrotik	RB/532	NA
Antenna	MTI Wireless Edge	MT-345013	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna, connected to the RF port of the radio card, hosted by a router is mounted on a non-conductive pole. The router and radio card are installed inside the flat panel antenna. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 19 dBi. Frequency = 2437 MHz. Mode = TX. 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 18" in length, 16 gauge Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

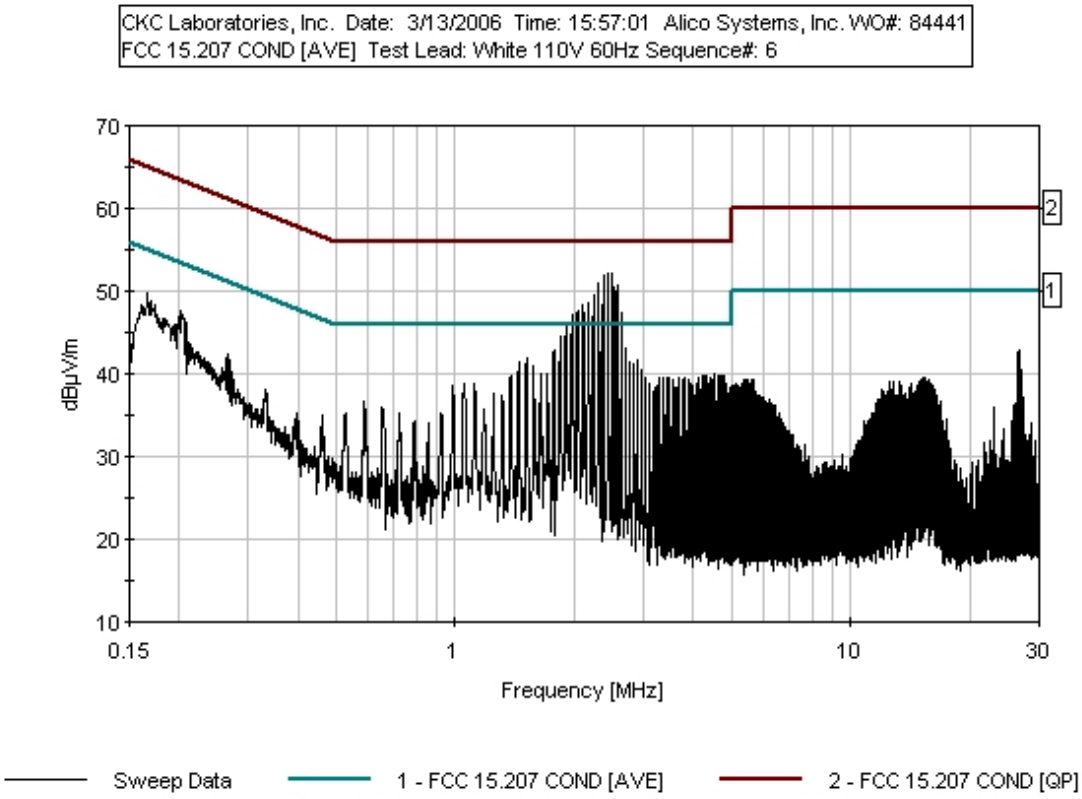
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1 Ave	2.434M	39.3	+0.1	+5.8	+0.2	+0.1	+0.0	45.5	46.0	-0.5	White
^	2.434M	46.0	+0.1	+5.8	+0.2	+0.1	+0.0	52.2	46.0	+6.2	White
3 Ave	2.370M	38.2	+0.1	+5.8	+0.2	+0.1	+0.0	44.4	46.0	-1.6	White
^	2.370M	45.8	+0.1	+5.8	+0.2	+0.1	+0.0	52.0	46.0	+6.0	White
5 Ave	2.566M	37.4	+0.1	+5.8	+0.2	+0.1	+0.0	43.6	46.0	-2.4	White
^	2.566M	44.6	+0.1	+5.8	+0.2	+0.1	+0.0	50.8	46.0	+4.8	White

7 Ave	2.497M	37.0	+0.1	+5.8	+0.2	+0.1	+0.0	43.2	46.0	-2.8	White
^	2.497M	45.9	+0.1	+5.8	+0.2	+0.1	+0.0	52.1	46.0	+6.1	White
9	2.702M	36.8	+0.1	+5.8	+0.2	+0.1	+0.0	43.0	46.0	-3.0	White
10 Ave	2.302M	36.7	+0.1	+5.8	+0.2	+0.1	+0.0	42.9	46.0	-3.1	White
^	2.302M	44.7	+0.1	+5.8	+0.2	+0.1	+0.0	50.9	46.0	+4.9	White
12	1.779M	36.9	+0.1	+5.8	+0.1	+0.0	+0.0	42.9	46.0	-3.1	White
13 Ave	2.238M	36.1	+0.1	+5.8	+0.2	+0.1	+0.0	42.3	46.0	-3.7	White
^	2.238M	43.3	+0.1	+5.8	+0.2	+0.1	+0.0	49.5	46.0	+3.5	White
15 Ave	2.170M	35.9	+0.1	+5.8	+0.1	+0.0	+0.0	41.9	46.0	-4.1	White
^	2.170M	42.5	+0.1	+5.8	+0.1	+0.0	+0.0	48.5	46.0	+2.5	White
17 Ave	2.038M	35.8	+0.1	+5.8	+0.1	+0.0	+0.0	41.8	46.0	-4.2	White
^	2.038M	41.7	+0.1	+5.8	+0.1	+0.0	+0.0	47.7	46.0	+1.7	White
19 Ave	1.843M	34.7	+0.1	+5.8	+0.1	+0.0	+0.0	40.7	46.0	-5.3	White
^	1.843M	38.6	+0.1	+5.8	+0.1	+0.0	+0.0	44.6	46.0	-1.4	White
21 Ave	1.906M	34.5	+0.1	+5.8	+0.1	+0.0	+0.0	40.5	46.0	-5.5	White
^	1.906M	40.1	+0.1	+5.8	+0.1	+0.0	+0.0	46.1	46.0	+0.1	White
23 Ave	2.634M	33.0	+0.1	+5.8	+0.2	+0.1	+0.0	39.2	46.0	-6.8	White
^	2.634M	41.1	+0.1	+5.8	+0.2	+0.1	+0.0	47.3	46.0	+1.3	White
25 Ave	2.102M	32.8	+0.1	+5.8	+0.1	+0.0	+0.0	38.8	46.0	-7.2	White
^	2.102M	42.3	+0.1	+5.8	+0.1	+0.0	+0.0	48.3	46.0	+2.3	White
27 Ave	1.970M	31.7	+0.1	+5.8	+0.1	+0.0	+0.0	37.7	46.0	-8.3	White
^	1.970M	41.2	+0.1	+5.8	+0.1	+0.0	+0.0	47.2	46.0	+1.2	White


CKC Laboratories, Inc. Date: 3/13/2006 Time: 15:57:01 Alico Systems, Inc. WO#: 84441
FCC 15.207 COND [AVE] Test Lead: White 110V 60Hz Sequence#: 6
70
60
50
40
30
20
10
dBµV/m
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 COND [AVE]
2 - FCC 15.207 COND [QP]

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	16:25:46
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	7
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Router Board	Mikrotik	RB/532	NA
Antenna	HyperLink Technologies	HG2420P-120	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in enclosure, mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi Sector. Frequency = 2437 MHz. Mode: TX 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

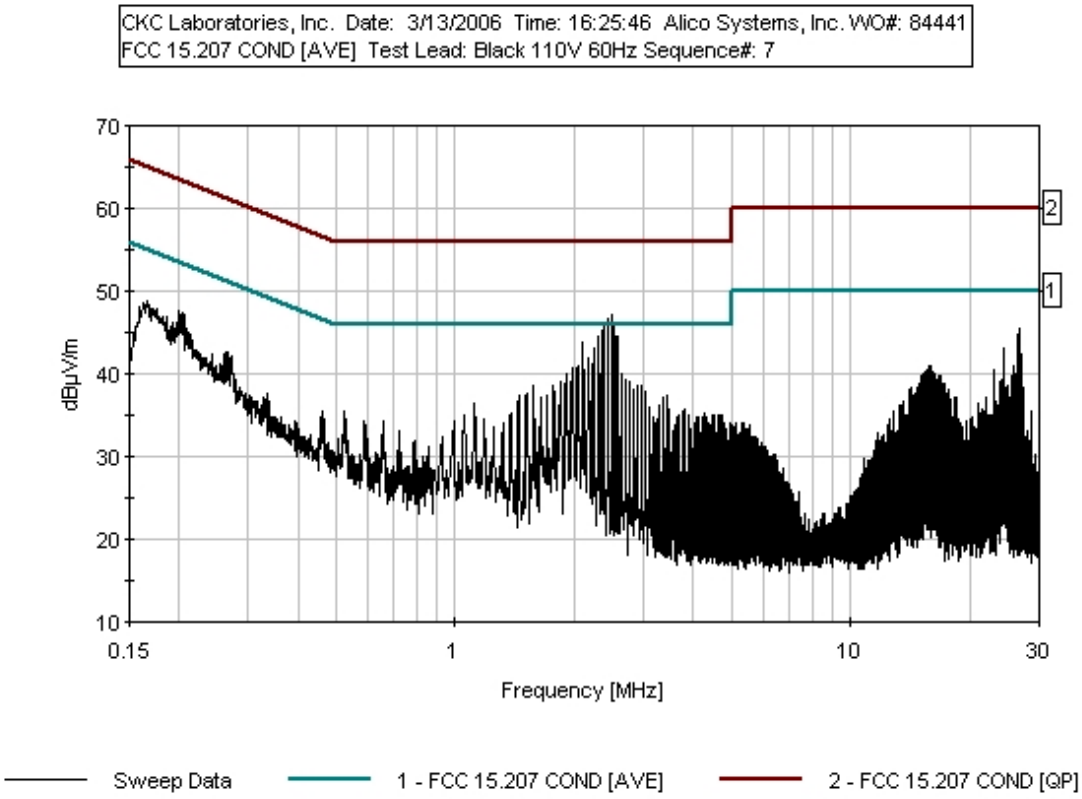
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2.561M	38.4	+0.1	+5.8	+0.2	+0.1	+0.0	44.6	46.0	-1.4	Black
2	2.302M	38.3	+0.1	+5.8	+0.2	+0.1	+0.0	44.5	46.0	-1.5	Black
3	2.098M	37.9	+0.1	+5.8	+0.1	+0.0	+0.0	43.9	46.0	-2.1	Black
4	2.234M	37.1	+0.1	+5.8	+0.1	+0.0	+0.0	43.1	46.0	-2.9	Black
5	2.170M	36.0	+0.1	+5.8	+0.1	+0.0	+0.0	42.0	46.0	-4.0	Black
6	26.608M	37.8	+0.3	+5.8	+0.4	+1.1	+0.0	45.4	50.0	-4.6	Black

7	2.434M Ave	35.0	+0.1	+5.8	+0.2	+0.1	+0.0	41.2	46.0	-4.8	Black
^	2.434M	40.4	+0.1	+5.8	+0.2	+0.1	+0.0	46.6	46.0	+0.6	Black
9	2.038M	35.0	+0.1	+5.8	+0.1	+0.0	+0.0	41.0	46.0	-5.0	Black
10	2.502M Ave	34.5	+0.1	+5.8	+0.2	+0.1	+0.0	40.7	46.0	-5.3	Black
^	2.502M	40.9	+0.1	+5.8	+0.2	+0.1	+0.0	47.1	46.0	+1.1	Black
12	1.974M	34.7	+0.1	+5.8	+0.1	+0.0	+0.0	40.7	46.0	-5.3	Black
13	26.485M	37.1	+0.3	+5.8	+0.4	+1.1	+0.0	44.7	50.0	-5.3	Black
14	2.370M Ave	34.0	+0.1	+5.8	+0.2	+0.1	+0.0	40.2	46.0	-5.8	Black
^	2.370M	39.7	+0.1	+5.8	+0.2	+0.1	+0.0	45.9	46.0	-0.1	Black
16	2.634M	33.9	+0.1	+5.8	+0.2	+0.1	+0.0	40.1	46.0	-5.9	Black
17	199.450k	41.6	+0.2	+5.8	+0.0	+0.0	+0.0	47.6	53.6	-6.0	Black
18	26.547M	36.3	+0.3	+5.8	+0.4	+1.1	+0.0	43.9	50.0	-6.1	Black


CKC Laboratories, Inc. Date: 3/13/2006 Time: 16:25:46 Alico Systems, Inc. WO#: 84441
FCC 15.207 COND [AVE] Test Lead: Black 110V 60Hz Sequence#: 7
70
60
50
40
30
20
10
dBµV/m
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 COND [AVE]
2 - FCC 15.207 COND [QP]

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.207 COND [AVE]**		
Work Order #:	**84441**	Date:	3/13/2006
Test Type:	**Conducted Emissions**	Time:	16:32:59
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	8
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		110V 60Hz
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Power Supply	AULT Inc	PW118	NA
Router Board	Mikrotik	RB/532	NA
Antenna	HyperLink Technologies	HG2420P-120	NA
Passive POE Injector	Hyperlink Technologies	BT-CAT5-P1	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in enclosure, mounted on a non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via UTP through a Power Over Ethernet power supply system. The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi Sector. Frequency = 2437 MHz. Mode: TX 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed. Modification: Two ferrites installed on UTP. Fair rite 0443167251, 1 loop inside the enclosure, 1 loop outside the enclosure. Power Supply: 118 Passive POE. Ground braid installed on Passive POE: 12" in length, Fair rite 0443167251 installed on Power supply cable, POE end. 1 loop.

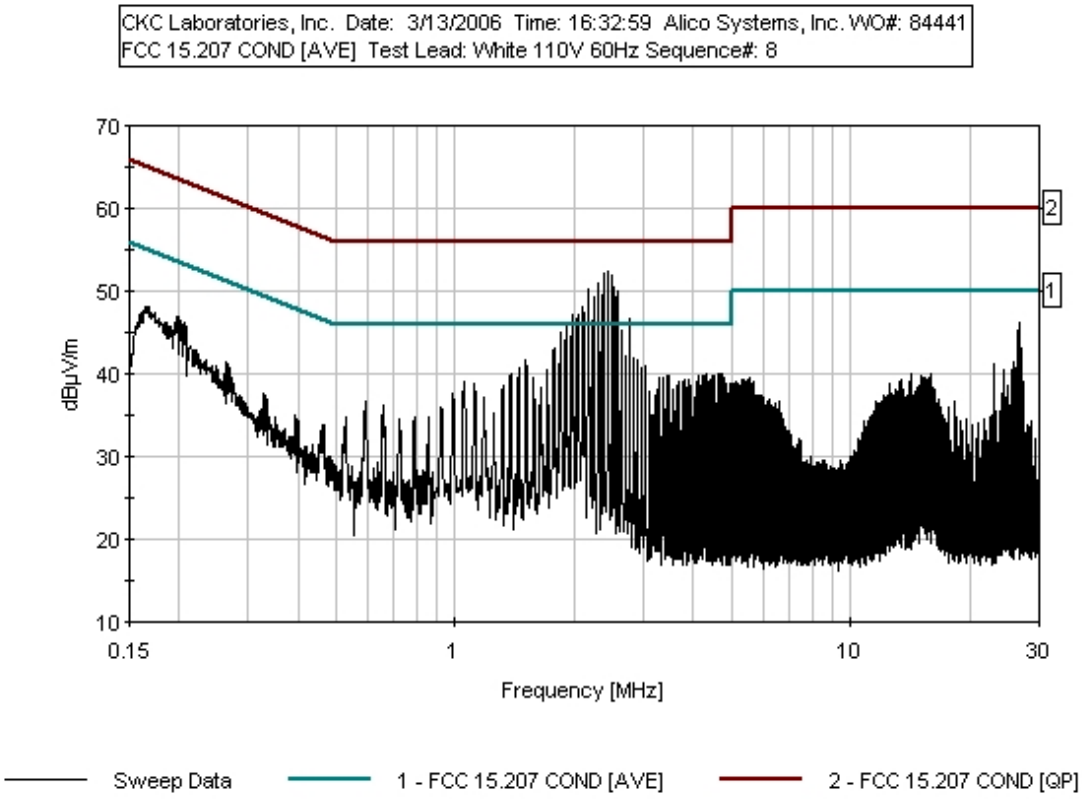
Transducer Legend:

T1=150kHz HPF Asset 02610	T2=6dB Attenuator P05267 092807
T3=Cable #21 Conducted Site A 070206	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1 Ave	2.434M	39.4	+0.1	+5.8	+0.2	+0.1	+0.0	45.6	46.0	-0.4	White
^	2.434M	46.1	+0.1	+5.8	+0.2	+0.1	+0.0	52.3	46.0	+6.3	White
3 Ave	2.370M	38.2	+0.1	+5.8	+0.2	+0.1	+0.0	44.4	46.0	-1.6	White
^	2.370M	45.9	+0.1	+5.8	+0.2	+0.1	+0.0	52.1	46.0	+6.1	White
5 Ave	2.566M	36.9	+0.1	+5.8	+0.2	+0.1	+0.0	43.1	46.0	-2.9	White
^	2.566M	43.7	+0.1	+5.8	+0.2	+0.1	+0.0	49.9	46.0	+3.9	White

7	2.497M Ave	36.9	+0.1	+5.8	+0.2	+0.1	+0.0	43.1	46.0	-2.9	White
^	2.497M	45.6	+0.1	+5.8	+0.2	+0.1	+0.0	51.8	46.0	+5.8	White
9	1.779M	37.1	+0.1	+5.8	+0.1	+0.0	+0.0	43.1	46.0	-2.9	White
10	2.302M Ave	36.8	+0.1	+5.8	+0.2	+0.1	+0.0	43.0	46.0	-3.0	White
^	2.302M	44.7	+0.1	+5.8	+0.2	+0.1	+0.0	50.9	46.0	+4.9	White
12	2.106M Ave	36.3	+0.1	+5.8	+0.1	+0.0	+0.0	42.3	46.0	-3.7	White
^	2.106M	42.0	+0.1	+5.8	+0.1	+0.0	+0.0	48.0	46.0	+2.0	White
14	2.238M Ave	36.1	+0.1	+5.8	+0.2	+0.1	+0.0	42.3	46.0	-3.7	White
^	2.238M	43.2	+0.1	+5.8	+0.2	+0.1	+0.0	49.4	46.0	+3.4	White
16	2.170M Ave	35.7	+0.1	+5.8	+0.1	+0.0	+0.0	41.7	46.0	-4.3	White
^	2.170M	44.2	+0.1	+5.8	+0.1	+0.0	+0.0	50.2	46.0	+4.2	White
18	2.038M Ave	35.6	+0.1	+5.8	+0.1	+0.0	+0.0	41.6	46.0	-4.4	White
^	2.038M	41.2	+0.1	+5.8	+0.1	+0.0	+0.0	47.2	46.0	+1.2	White
20	1.843M Ave	34.8	+0.1	+5.8	+0.1	+0.0	+0.0	40.8	46.0	-5.2	White
^	1.843M	38.9	+0.1	+5.8	+0.1	+0.0	+0.0	44.9	46.0	-1.1	White
22	1.906M Ave	34.6	+0.1	+5.8	+0.1	+0.0	+0.0	40.6	46.0	-5.4	White
^	1.906M	40.0	+0.1	+5.8	+0.1	+0.0	+0.0	46.0	46.0	+0.0	White
24	1.970M Ave	31.7	+0.1	+5.8	+0.1	+0.0	+0.0	37.7	46.0	-8.3	White
^	1.970M	41.1	+0.1	+5.8	+0.1	+0.0	+0.0	47.1	46.0	+1.1	White
26	2.629M Ave	31.4	+0.1	+5.8	+0.2	+0.1	+0.0	37.6	46.0	-8.4	White
^	2.629M	39.1	+0.1	+5.8	+0.2	+0.1	+0.0	45.3	46.0	-0.7	White
28	2.761M Ave	27.8	+0.1	+5.8	+0.2	+0.1	+0.0	34.0	46.0	-12.0	White
^	2.761M	40.4	+0.1	+5.8	+0.2	+0.1	+0.0	46.6	46.0	+0.6	White


CKC Laboratories, Inc. Date: 3/13/2006 Time: 16:32:59 Alico Systems, Inc. WO#: 84441
FCC 15.207 COND [AVE] Test Lead: White 110V 60Hz Sequence#: 8
70
60
50
40
30
20
10
dBµV/m
0.15
1
10
30
Frequency [MHz]
2
1
Sweep Data
1 - FCC 15.207 COND [AVE]
2 - FCC 15.207 COND [QP]

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.247 (d) (FCC 15.205) 25- 40000 MHz**		
Work Order #:	**84441**	Date:	3/9/2006
Test Type:	**Radiated Scan**	Time:	08:48:59
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	14
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2407M		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	Pacific Wireless	MA24-7	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi. Frequency = 2412 MHz. Power level = 25 dBm. 110Vac, 60 Hz, 22 °C, 48% relative humidity.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7236.000M Ave	36.6	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	42.4	54.0	-11.6	Horiz
^	7236.000M	58.9	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	64.7	54.0	+10.7	Horiz
3	7240.000M Ave	36.1	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	41.9	54.0	-12.1	Vert
^	7240.000M	58.2	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	64.0	54.0	+10.0	Vert
5	4824.000M	41.1	+4.8 +0.6	+31.8	-37.9	+1.4	+0.0	41.8	54.0	-12.2	Horiz
6	9648.000M Ave	26.5	+7.8 +2.9	+36.0	-36.4	+2.2	+0.0	39.0	54.0	-15.0	Horiz
^	9648.000M	37.8	+7.8 +2.9	+36.0	-36.4	+2.2	+0.0	50.3	54.0	-3.7	Horiz

8	9652.000M Ave	26.1	+7.8 +2.9	+36.0	-36.4	+2.2	+0.0	38.6	54.0	-15.4	Vert
^	9652.000M	38.2	+7.8 +2.9	+36.0	-36.4	+2.2	+0.0	50.7	54.0	-3.3	Vert
10	4824.000M Ave	33.9	+4.8 +0.6	+31.8	-37.9	+1.4	+0.0	34.6	54.0	-19.4	Vert
^	4824.000M	54.9	+4.8 +0.6	+31.8	-37.9	+1.4	+0.0	55.6	54.0	+1.6	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Alico Systems, Inc.**
Specification: **FCC 15.247 (d) (FCC 15.205) 25- 40000 MHz**
Work Order #: **84441** Date: 3/8/2006
Test Type: **Radiated Scan** Time: 16:30:29
Equipment: **Broadband 802.11 B/G/A Access Point and Bridge** Sequence#: 13
Manufacturer: Alico Systems, Inc Tested By: E. Wong
Model: WNE-2407M
S/N:

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	Pacific Wireless	MA24-7	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Power Supply	Cincon	TR25120	NA
Router Board	PC Engine	WRAP 2C	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi. Frequency = 2437 MHz. Power level = 25 dBm. 110Vac, 60 Hz, 22 °C, 48% relative humidity.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606 T2=Horn 6246_072206
T3=HP 83017A 071606 T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7317.500M Ave	40.7	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	47.0	54.0	-7.0	Horiz
^	7317.500M	64.3	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	70.6	54.0	+16.6	Horiz
3	7320.500M Ave	40.0	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	46.3	54.0	-7.7	Vert
^	7320.500M	58.0	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	64.3	54.0	+10.3	Vert
5	4874.000M	45.2	+4.9 +0.6	+31.9	-37.9	+1.5	+0.0	46.2	54.0	-7.8	Horiz
6	9754.500M Ave	25.9	+7.9 +2.7	+36.1	-36.3	+2.2	+0.0	38.5	54.0	-15.5	Horiz
^	9754.500M	37.8	+7.9 +2.7	+36.1	-36.3	+2.2	+0.0	50.4	54.0	-3.6	Horiz

8	9760.200M Ave	25.5	+7.9 +2.7	+36.1	-36.3	+2.2	+0.0	38.1	54.0	-15.9	Vert
^	9760.200M	36.5	+7.9 +2.7	+36.1	-36.3	+2.2	+0.0	49.1	54.0	-4.9	Vert
10	4874.000M Ave	36.4	+4.9 +0.6	+31.9	-37.9	+1.5	+0.0	37.4	54.0	-16.6	Vert
^	4874.000M	56.1	+4.9 +0.6	+31.9	-37.9	+1.5	+0.0	57.1	54.0	+3.1	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Alico Systems, Inc.**
Specification: **FCC 15.247 (d) (FCC 15.205) 25- 40000 MHz**
Work Order #: **84441** Date: 3/8/2006
Test Type: **Radiated Scan** Time: 16:14:30
Equipment: **Broadband 802.11 B/G/A Access Point and Bridge** Sequence#: 12
Manufacturer: Alico Systems, Inc Tested By: E. Wong
Model: WNE-2407M
S/N:

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	Pacific Wireless	MA24-7	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Power Supply	Cincon	TR25120	NA
Router Board	PC Engine	WRAP 2C	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 7 dBi. Frequency = 2462 MHz Power level = 25 dBm. 110Vac, 60 Hz, 22 °C, 48% relative humidity.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606 T2=Horn 6246_072206
T3=HP 83017A 071606 T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7386.000M Ave	37.9	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	44.7	54.0	-9.3	Vert
^	7386.000M	57.0	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	63.8	54.0	+9.8	Vert
3	7393.500M Ave	37.2	+6.1 +1.6	+34.7	-37.3	+1.8	+0.0	44.1	54.0	-9.9	Horiz
^	7393.500M	61.7	+6.1 +1.6	+34.7	-37.3	+1.8	+0.0	68.6	54.0	+14.6	Horiz
5	4924.000M	42.7	+5.0 +0.6	+32.0	-37.8	+1.5	+0.0	44.0	54.0	-10.0	Horiz
6	4922.000M Ave	33.8	+4.9 +0.6	+32.0	-37.8	+1.5	+0.0	35.0	54.0	-19.0	Vert
^	4922.000M	51.6	+4.9 +0.6	+32.0	-37.8	+1.5	+0.0	52.8	54.0	-1.2	Vert

8	9855.500M Ave	27.1	+7.9 +2.5	+36.2	-36.3	+2.2	+0.0	39.6	80.0	-40.4	Horiz
^	9855.500M	41.8	+7.9 +2.5	+36.2	-36.3	+2.2	+0.0	54.3	80.0	-25.7	Horiz
10	9841.000M Ave	27.0	+7.9 +2.5	+36.2	-36.3	+2.2	+0.0	39.5	80.0	-40.5	Vert
^	9841.000M	41.2	+7.9 +2.5	+36.2	-36.3	+2.2	+0.0	53.7	80.0	-26.3	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.247 (d) (FCC 15.205) 25- 40000 MHz**		
Work Order #:	**84441**	Date:	3/8/2006
Test Type:	**Radiated Scan**	Time:	13:51:48
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	7
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2415O		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	HyperLink Technologies	HG2415U-PRO	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 15 dBi. Frequency = 2412 MHz. Power level = 21 dBm. 110Vac, 60 Hz, 22 °C, 48% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	7229.420M	45.6	+5.9	+34.3	-37.4	+1.8	+0.0	50.2	54.0	-3.8	Vert
2	7234.500M	40.9	+5.9	+34.3	-37.4	+1.8	+0.0	45.5	54.0	-8.5	Vert
3	7236.000M Ave	32.2	+5.9	+34.3	-37.4	+1.8	+0.0	36.8	54.0	-17.2	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.247 (c) (FCC 15.209) 30 - 2500 MHz**		
Work Order #:	**84441**	Date:	3/8/2006
Test Type:	**Radiated Scan**	Time:	14:01:15
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	8
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2415O		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	HyperLink Technologies	HG2415U-PRO	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 15 dBi. Frequency = 2437 MHz. Power level = 21 dBm. 110Vac, 60 Hz, 22°C, 48% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7315.000M Ave	39.9	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	46.2	54.0	-7.8	Vert
^	7315.000M	58.6	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	64.9	54.0	+10.9	Vert
3	7311.000M Ave	37.2	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	43.5	54.0	-10.5	Horiz
^	7311.000M	52.5	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	58.8	54.0	+4.8	Horiz

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**15.247(d) Bandedge Compliance**		
Work Order #:	**84441**	Date:	3/8/2006
Test Type:	**Radiated Scan**	Time:	14:08:52
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	9
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2415O		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	HyperLink Technologies	HG2415U-PRO	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 15 dBi. Frequency = 2462 MHz Power level = 21 dBm. 110Vac, 60 Hz, 22°C, 48% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7386.000M Ave	33.9	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	40.7	54.0	-13.3	Vert
^	7386.000M	52.8	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	59.6	54.0	+5.6	Vert
3	7386.000M Ave	33.3	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	40.1	54.0	-13.9	Horiz
^	7386.000M	50.6	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	57.4	54.0	+3.4	Horiz

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.247 (c) (FCC 15.209) 30 - 2500 MHz**		
Work Order #:	**84441**	Date:	3/1/2006
Test Type:	**Radiated Scan**	Time:	10:21:45
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	4
Manufacturer:	Alico Systems, Inc.	Tested By:	E. Wong
Model:	WNE-2419F		
S/N:	NA		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card*	Ubiquiti Networks	Super Range 2	NA
Antenna	MTI Wireless Edge	MT-345013	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 19 dBi. Frequency = 2437 MHz. Power level = 25.4 dBm. 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7311.000M Ave	33.2	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	39.5	54.0	-14.5	Vert
^	7311.000M	54.7	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	61.0	54.0	+7.0	Vert
3	7311.000M Ave	33.2	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	39.5	54.0	-14.5	Horiz
^	7311.000M	52.4	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	58.7	54.0	+4.7	Horiz

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.247 (c) (FCC 15.209) 30 - 2500 MHz**		
Work Order #:	**84441**	Date:	3/1/2006
Test Type:	**Radiated Scan**	Time:	10:27:18
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	3
Manufacturer:	Alico Systems, Inc.	Tested By:	E. Wong
Model:	WNE-2419F		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Antenna	MTI Wireless Edge	MT-345013	NA
Radio Card	Ubiquiti Networks	Super Range 2	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 19 dBi. Frequency = 2412 MHz. Power level = 25.4 dBm. 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7236.000M Ave	30.4	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	36.2	54.0	-17.8	Horiz
^	7236.000M	43.7	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	49.5	54.0	-4.5	Horiz
3	7236.000M Ave	28.8	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	34.6	54.0	-19.4	Vert
^	7236.075M	40.4	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	46.2	54.0	-7.8	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**15.247(d) Bandedge Compliance**		
Work Order #:	**84441**	Date:	3/1/2006
Test Type:	**Radiated Scan**	Time:	10:31:05
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	5
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2419F		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	MTI Wireless Edge	MT-345013	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 19 dBi. Frequency = 2462 MHz. Power level = 25.4 dBm. 110Vac, 60 Hz, 21°C, 43% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7382.000M Ave	32.1	+6.1 +1.5	+34.6	-37.3	+1.8	+0.0	38.8	54.0	-15.2	Horiz
^	7382.000M	52.6	+6.1 +1.5	+34.6	-37.3	+1.8	+0.0	59.3	54.0	+5.3	Horiz
3	7388.400M Ave	29.8	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	36.6	54.0	-17.4	Vert
^	7388.400M	45.9	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	52.7	54.0	-1.3	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.247 (d) (FCC 15.205) 25- 40000 MHz**		
Work Order #:	**84441**	Date:	3/8/2006
Test Type:	**Radiated Scan**	Time:	11:33:06
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	5
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	HyperLink Technologies	HG2420P-120	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi. Frequency = 2437 MHz. Power level = 21 dBm. 110Vac, 60 Hz, 22°C, 48% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7315.000M Ave	38.9	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	45.2	54.0	-8.8	Horiz
^	7315.000M	55.5	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	61.8	54.0	+7.8	Horiz
3	7315.000M Ave	38.2	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	44.5	54.0	-9.5	Vert
^	7315.000M	57.0	+6.0 +1.4	+34.5	-37.4	+1.8	+0.0	63.3	54.0	+9.3	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**15.247(d) Bandedge Compliance**		
Work Order #:	**84441**	Date:	3/8/2006
Test Type:	**Radiated Scan**	Time:	11:18:55
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	4
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	HyperLink Technologies	HG2420P-120	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi. Frequency = 2412 MHz. Power level = 21 dBm. 110Vac, 60 Hz, 22°C, 48% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7236.000M Ave	32.8	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	38.6	54.0	-15.4	Horiz
^	7236.000M	51.1	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	56.9	54.0	+2.9	Horiz
3	7236.000M Ave	31.8	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	37.6	54.0	-16.4	Vert
^	7236.000M	46.5	+5.9 +1.2	+34.3	-37.4	+1.8	+0.0	52.3	54.0	-1.7	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Alico Systems, Inc.**		
Specification:	**FCC 15.247 (d) (FCC 15.205) 25- 40000 MHz**		
Work Order #:	**84441**	Date:	3/8/2006
Test Type:	**Radiated Scan**	Time:	11:48:39
Equipment:	**Broadband 802.11 B/G/A Access Point and Bridge**	Sequence#:	6
Manufacturer:	Alico Systems, Inc	Tested By:	E. Wong
Model:	WNE-2420S		
S/N:			

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Radio Card	Ubiquiti Networks	Super Range 2	NA
Antenna	HyperLink Technologies	HG2420P-120	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Dell	Inspiron 600M	GH1TU71
Router Board	PC Engine	WRAP 2C	NA
Power Supply	Cincon	TR25120	NA

Test Conditions / Notes:

Pole mounted antenna is connected to the RF port of the radio card hosted by a router in open frame are mounted on non-conductive pole. The router and radio card are located 1 meter above the ground plane. The router is connected to a remote laptop via RS232 and UTP The laptop executes test routine to exercise the EUT. Antenna gain = 20 dBi. Frequency = 2462 MHz. Power level = 21 dBm. 110Vac, 60 Hz, 22°C, 48% relative humidity. Bandpass filter: Anatech Microwave MN: AB1694 SN 05 Installed.

Transducer Legend:

T1=Cable #20 48ft Heliax 091606	T2=Horn 6246_072206
T3=HP 83017A 071606	T4=1-40 GHz Cable_020807
T5=HPF 2.4 GHz High Pass Filter 042507	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	7386.000M Ave	35.9	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	42.7	54.0	-11.3	Vert
^	7386.000M	53.8	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	60.6	54.0	+6.6	Vert
3	7386.000M Ave	35.6	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	42.4	54.0	-11.6	Horiz
^	7386.000M	54.8	+6.1 +1.6	+34.6	-37.3	+1.8	+0.0	61.6	54.0	+7.6	Horiz