

Synapsense Corporation

ADDENDUM TEST REPORT FOR 90296-14

SynapStamp Radio Modules, 11-0606-001 & 11-0606-011

Tested To The Following Standards:

FCC Part 15 Subpart C Sections 15.209 & 15.247
and
RSS-210 Version 7

Report No.: 90296-14A

Date of issue: April 28, 2010



TESTING
CERT #803.01, 803.02,
803.05, 803.06

This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Synapsense Corporation
2365 Iron Point Road, Suite 100
Folsom, CA 95630

Representative: Pat Weston
Customer Reference Number: 9742

DATE OF EQUIPMENT RECEIPT:**DATE(S) OF TESTING:****REPORT PREPARED BY:**

Dianne Dudley
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 90296

February 2, 2010

February 2 - 8, 2010

Revision History

Original: To test the SynapStamp Radio Modules, 11-0606-001 & 11-0606-011 to the standards FCC Part 15 Subpart C Sections 15.207 & 15.247

Addendum A: To correct an error on the front of the report from 15.207 to 15.209, to add the Customer Supplied PCB as a peripheral during testing, to correct the number of operating channels from 1 to 83, include additional antenna information to section 15.203, added reference to 15.109 requirements in the test conditions for testing of 15.247(d), added antenna information to the test conditions in section 15.247(d) and replaced entire 15.247(d) with corrected data.

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.



Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Site Registration & Accreditation Information

| Location | Japan | Canada | FCC |
|------------|-----------------------|---------|-------|
| Mariposa A | R-563, C-578 & T-1492 | 3082A-2 | 90477 |

SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C

| Description | Test Procedure/Method | Results |
|------------------------------|--|---------|
| Occupied Bandwidth | FCC Part 15 Subpart C Section 15.247(a)(2) | Pass |
| Peak Power | FCC Part 15 Subpart C Section 15.247(b)(3) | Pass |
| Spurious Conducted Emissions | FCC Part 15 Subpart C Section 15.247(d) | Pass |
| Spurious Radiated Emissions | FCC Part 15 Subpart C Section 15.209 / 15.247(d) | Pass |
| Band Edge | FCC Part 15 Subpart C Section 15.247(d) | Pass |
| Peak Power Spectral Density | FCC Part 15 Subpart C Section 15.247(e) | Pass |
| 99% Occupied Bandwidth | RSS-210 Version 7 | Pass |

Conditions During Testing

This list is a summary of the conditions noted for or modifications made to the equipment during testing.

| Summary of Conditions |
|-----------------------|
| None |

EQUIPMENT UNDER TEST (EUT)

EQUIPMENT UNDER TEST

SynapStamp Radio Module

Manuf: Synapsense Corporation

Model: 11-0606-011

Serial: NA

SynapStamp Radio Module

Manuf: Synapsense Corporation

Model: 11-0606-001

Serial: NA

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device.

Customer Supplied PCB

Manuf: Synapsense Corporation

Model: NA

Serial: NA

FCC PART 15 SUBPART C

This report contains EMC emissions test results under United States Federal Communications Commission (FCC) 47 CRF 15C requirements for Unlicensed Radio Frequency Devices, Subpart C - Intentional Radiators.

Temperature And Humidity During Testing

The temperature during testing was within +15°C and + 35°C.

The relative humidity was between 20% and 75%.

15.31(e) Voltage Variations

Not applicable to this device because it is battery powered.

15.31(m) Number Of Channels

This device operates on 83 different channels.

15.33(a) Frequency Ranges Tested

15.209/15.225/15.247 Radiated Emissions: 9 kHz - 25 GHz

15.203 Antenna Requirements

001 = Internal Antenna:

The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules. Internal antenna's gain is less than 2.2dBi.

011 = External Antenna:

The antenna is external to the EUT with a MMCX connector with a 2.2 dBi antenna.

EUT Operating Frequency

The EUT was operating at 2405-2480 MHz

15.247(a)(2) Occupied Bandwidth

| Test Equipment | | | | |
|----------------|------------|------------|------------|-------|
| Equipment | Serial | Cal Date | Cal Due | Asset |
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**

Specification: **15.247(a)(2)**

Work Order #: **90296**

Date: 2/3/2010

Test Type: **Radiated Scan**

Time: 15:46:52

Equipment: **SynapStamp Radio Module**

Manufacturer: Synapsense Corporation

Tested By: Chuck Kendall

Model: 11-0606-011

S/N: NA

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

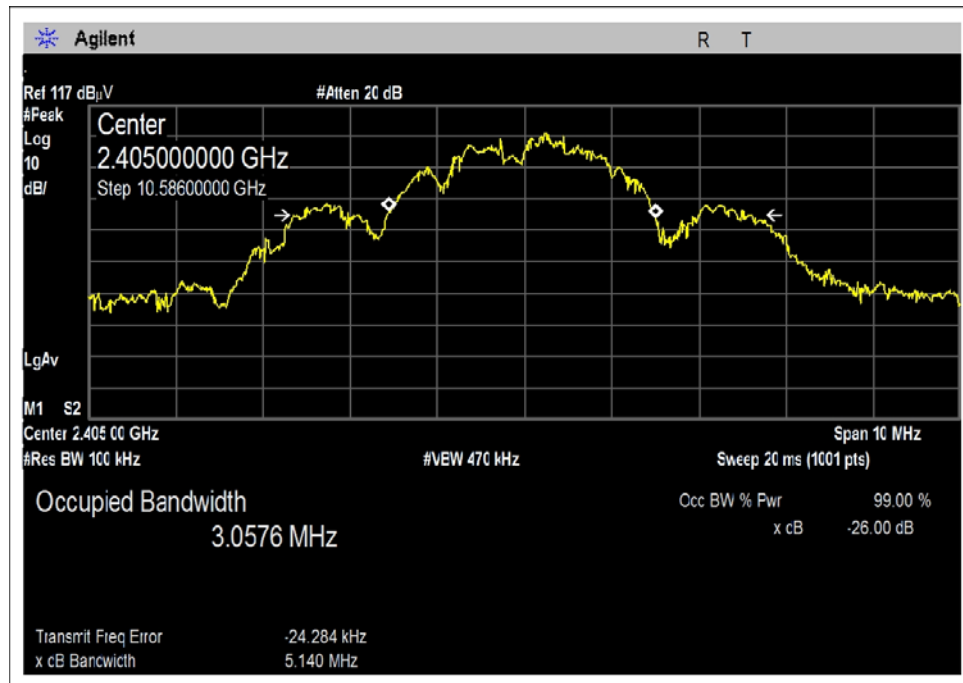
Test Conditions / Notes:

15.247(a)(2) Minimum 6 dB Bandwidth-Conducted
 New batteries installed in +5dBm transceiver.
 Frequencies of interest 2405-2480 MHz
 70° Fahrenheit
 35% Relative Humidity
 Module is atop a plastic case. Antenna cable is directly connected to the S/A.

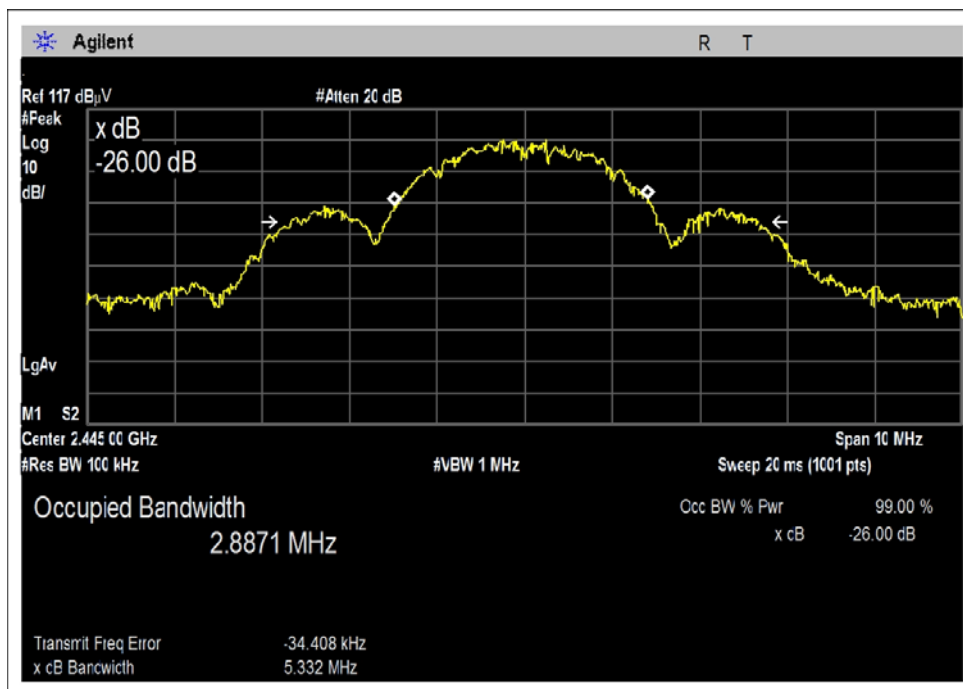
Test Data

| Frequency (MHz) | 6 BW (MHz) | 99% BW (MHz) | 26 dB BW (MHz) |
|-----------------|------------|--------------|----------------|
| 2405 | 1.583 | 2.9023 | 5.140 |
| 2445 | 1.557 | 2.8480 | 5.332 |
| 2480 | 1.647 | 2.8435 | 5.191 |

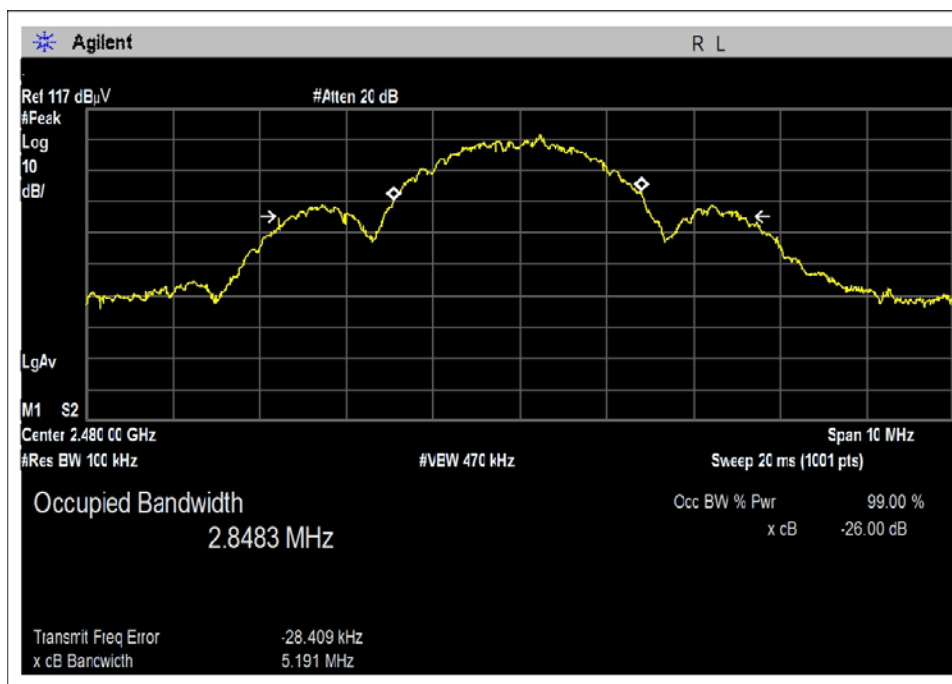
Test Plots



15.247 Occupied Bandwidth (-26dB)-Lo Channel



15.247 Occupied Bandwidth (-26dB)-Mid Channel



15.247 Occupied Bandwidth (-26dB)-High Channel

Test Setup Photos



15.247b)(3) Peak Power

| Test Equipment | | | | |
|----------------|------------|------------|------------|-------|
| Equipment | Serial | Cal Date | Cal Due | Asset |
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**

Specification: **15.247(b)(3)**

Work Order #: **90296**

Date: 2/3/2010

Test Type: **Maximized Emissions**

Time: 15:46:52

Equipment: **SynapStamp Radio Module**

Sequence#: 7

Manufacturer: Synapsense Corporation

Tested By: Chuck Kendall

Model: 11-0606-011

S/N: NA

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

| |
|---|
| 15.247(b)(3) Peak Power Output-Conducted New batteries installed in +5dBm transceiver. Frequencies of interest 2405-2480 MHz 70 ° Fahrenheit 35% Relative Humidity Module is atop a plastic case. Antenna cable is directly connected to the S/A. RBW = 3MHz VBW = 8MHz Span = 10MHz Sweep time = auto |
|---|

Test Data

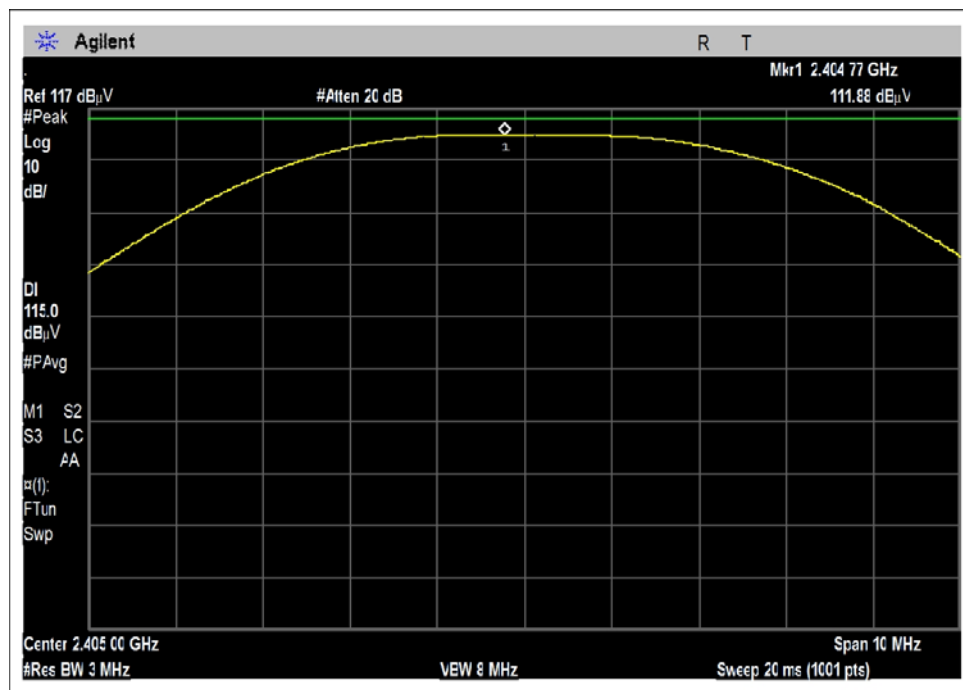
Measurement Data:

Reading listed by order taken.

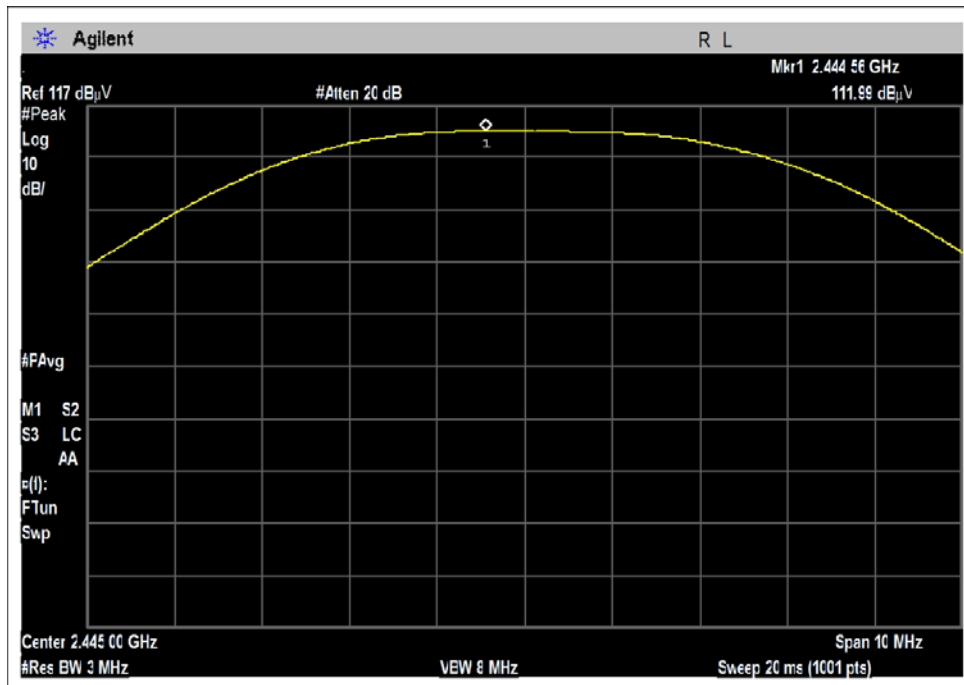
Test Distance: None

| Freq. | dBm | mWatt | Limit |
|-----------|-----|-------|--------|
| 2479.890M | 4.9 | 3.09 | 1 Watt |
| 2444.560M | 5.0 | 3.16 | 1 Watt |
| 2404.680M | 5.0 | 3.16 | 1 Watt |

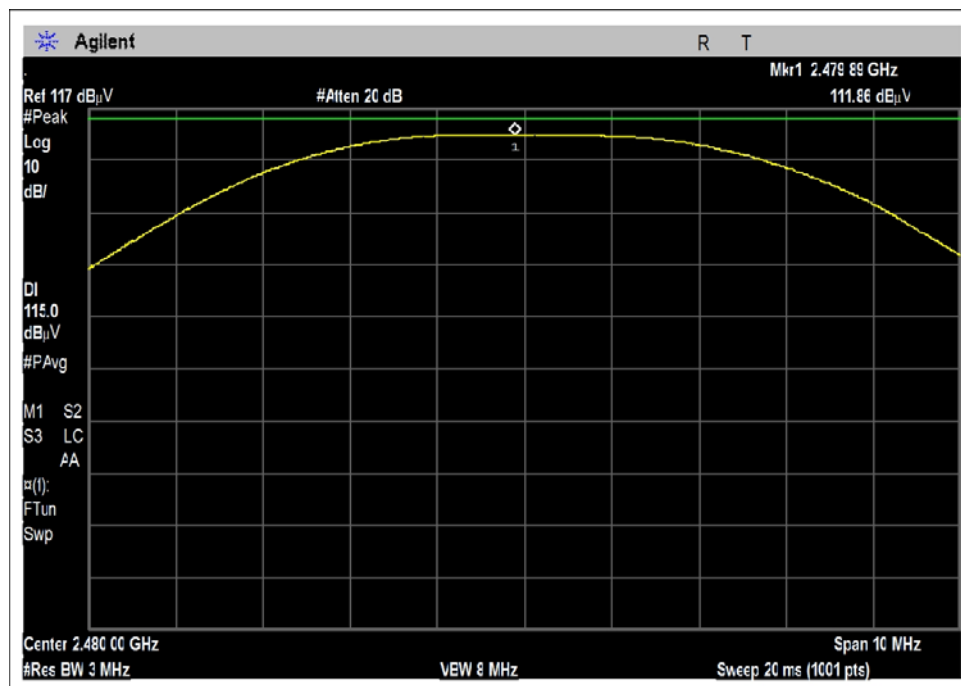
Test Data Plots



15.247(b)(3) Peak Power-Low Channel



15.247(b)(3) Peak Power-Mid Channel



15.247(b)(3) Peak Power-High Channel

Test Setup Photos



15.247(d) Spurious Conducted Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **15.247(d) SynapSense Cond Spurious**
 Work Order #: **90296** Date: 2/3/2010
 Test Type: **Radiated Scan** Time: 14:45:23
 Equipment: **SynapStamp Radio Module** Sequence#: 6
 Manufacturer: Synapsense Corporation Tested By: Chuck Kendall
 Model: 11-0606-011
 S/N: NA

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|----------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

| |
|--|
| 15.247(d) Spurious Emissions-Conducted New batteries installed in +5dBm transceiver. Frequencies of interest 2405-2480 MHz 70 ° Fahrenheit 35% Relative Humidity Module is atop a plastic case. Antenna cable is directly connected to the S/A. RBW = 100kHz VBW = 300kHz Spans: 9 kHz-30MHz; 30MHz-1GHz; 1-5GHz; 5-12.5 GHz; 12.5-25 GHz Sweep time = auto |
|--|

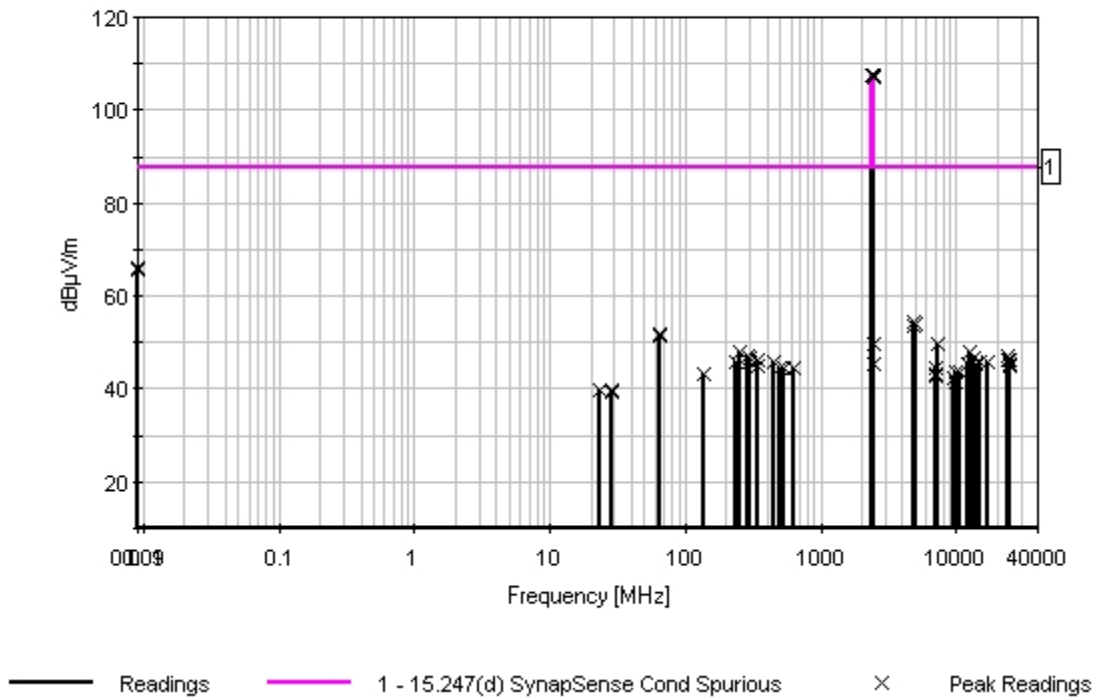
Transducer Legend:

| Measurement Data: | | Reading listed by margin. | | | | | Test Distance: None | | | | |
|--------------------------|----------------|---------------------------|----|----|----|----|---------------------|----------------|------------------------------|--------------|--------------|
| # | Freq MHz | Rdng dBμV | dB | dB | dB | dB | Dist Table | Corr dBμV/m | Spec dBμV/m | Margin dB | Polar Ant |
| 1 | 2445.208M | 107.6 | | | | | +0.0 | 107.6 | 107.6 | +0.0 | None |
| | | | | | | | | | Mid Fundamental- 2445 MHz | | |
| 2 | 2405.206M | 107.5 | | | | | +0.0 | 107.5 | 107.6 | -0.1 | None |
| | | | | | | | | | Lo Fundamental- 2405 MHz | | |
| 3 | 2480.058M | 107.1 | | | | | +0.0 | 107.1 | 107.6 | -0.5 | None |
| | | | | | | | | | Hi Fundamental- 2480 MHz | | |
| 4 | 9.000k | 66.2 | | | | | +0.0 | 66.2 | 87.6 | -21.4 | None |
| | | | | | | | | | Hi-Ch | | |
| 5 | 9.000k | 66.1 | | | | | +0.0 | 66.1 | 87.6 | -21.5 | None |
| | | | | | | | | | Mid Ch | | |
| 6 | 9.000k | 65.8 | | | | | +0.0 | 65.8 | 87.6 | -21.8 | None |
| | | | | | | | | | Lo Ch | | |
| 7 | 4888.000M | 54.3 | | | | | +0.0 | 54.3 | 87.6 | -33.3 | None |
| | | | | | | | | | Mid-Ch | | |
| 8 | 4960.000M | 54.1 | | | | | +0.0 | 54.1 | 87.6 | -33.5 | None |
| | | | | | | | | | Hi Ch | | |
| 9 | 4812.000M | 53.6 | | | | | +0.0 | 53.6 | 87.6 | -34.0 | None |
| | | | | | | | | | Lo Ch | | |
| 10 | 64.000M | 51.8 | | | | | +0.0 | 51.8 | 87.6 | -35.8 | None |
| | | | | | | | | | Hi-Ch | | |
| 11 | 64.000M | 51.8 | | | | | +0.0 | 51.8 | 87.6 | -35.8 | None |
| | | | | | | | | | Mid-Ch | | |
| 12 | 64.000M | 51.2 | | | | | +0.0 | 51.2 | 87.6 | -36.4 | None |
| | | | | | | | | | Lo Ch | | |
| 13 | 7332.500M | 49.5 | | | | | +0.0 | 49.5 | 87.6 | -38.1 | None |
| | | | | | | | | | Mid-Ch | | |
| 14 | 12402.500 M | 48.1 | | | | | +0.0 | 48.1 | 87.6 | -39.5 | None |
| | | | | | | | | | Hi Ch | | |
| 15 | 254.100M | 47.8 | | | | | +0.0 | 47.8 | 87.6 | -39.8 | None |
| | | | | | | | | | Hi-Ch | | |
| 16 | 24225.000 M | 47.1 | | | | | +0.0 | 47.1 | 87.6 | -40.5 | None |
| | | | | | | | | | Mid Ch | | |
| 17 | 289.000M | 46.9 | | | | | +0.0 | 46.9 | 87.6 | -40.7 | None |
| | | | | | | | | | Hi-Ch | | |
| 18 | 13662.500 M | 46.6 | | | | | +0.0 | 46.6 | 87.6 | -41.0 | None |
| | | | | | | | | | Mid Ch | | |
| 19 | 294.800M | 46.6 | | | | | +0.0 | 46.6 | 87.6 | -41.0 | None |
| | | | | | | | | | Lo Ch | | |
| 20 | 341.400M | 46.4 | | | | | +0.0 | 46.4 | 87.6 | -41.2 | None |
| | | | | | | | | | Hi-Ch | | |

| | | | | | | | |
|----|----------------|------|------|------|--------|-------|------|
| 21 | 24925.000 M | 46.4 | +0.0 | 46.4 | 87.6 | -41.2 | None |
| | | | | | Hi Ch | | |
| 22 | 24100.000 M | 46.3 | +0.0 | 46.3 | 87.6 | -41.3 | None |
| | | | | | Lo Ch | | |
| 23 | 25000.000 M | 46.1 | +0.0 | 46.1 | 87.6 | -41.5 | None |
| | | | | | Hi Ch | | |
| 24 | 14875.000 M | 45.9 | +0.0 | 45.9 | 87.6 | -41.7 | None |
| | | | | | Hi Ch | | |
| 25 | 234.700M | 45.8 | +0.0 | 45.8 | 87.6 | -41.8 | None |
| | | | | | Lo Ch | | |
| 26 | 17100.000 M | 45.8 | +0.0 | 45.8 | 87.6 | -41.8 | None |
| | | | | | Mid Ch | | |
| 27 | 446.100M | 45.8 | +0.0 | 45.8 | 87.6 | -41.8 | None |
| | | | | | Hi-Ch | | |
| 28 | 299.700M | 45.6 | +0.0 | 45.6 | 87.6 | -42.0 | None |
| | | | | | Mid-Ch | | |
| 29 | 12222.500 M | 45.5 | +0.0 | 45.5 | 87.6 | -42.1 | None |
| | | | | | Mid Ch | | |
| 30 | 13862.500 M | 45.5 | +0.0 | 45.5 | 87.6 | -42.1 | None |
| | | | | | Lo Ch | | |
| 31 | 2496.000M | 45.5 | +0.0 | 45.5 | 87.6 | -42.1 | None |
| | | | | | Mid-Ch | | |
| 32 | 24937.500 M | 45.3 | +0.0 | 45.3 | 87.6 | -42.3 | None |
| | | | | | Mid Ch | | |
| 33 | 25000.000 M | 44.9 | +0.0 | 44.9 | 87.6 | -42.7 | None |
| | | | | | Lo Ch | | |
| 34 | 338.500M | 44.9 | +0.0 | 44.9 | 87.6 | -42.7 | None |
| | | | | | Mid-Ch | | |
| 35 | 343.300M | 44.8 | +0.0 | 44.8 | 87.6 | -42.8 | None |
| | | | | | Lo Ch | | |
| 36 | 7100.000M | 44.7 | +0.0 | 44.7 | 87.6 | -42.9 | None |
| | | | | | Mid Ch | | |
| 37 | 490.800M | 44.6 | +0.0 | 44.6 | 87.6 | -43.0 | None |
| | | | | | Mid-Ch | | |
| 38 | 527.600M | 44.6 | +0.0 | 44.6 | 87.6 | -43.0 | None |
| | | | | | Hi-Ch | | |
| 39 | 622.700M | 44.3 | +0.0 | 44.3 | 87.6 | -43.3 | None |
| | | | | | Hi-Ch | | |
| 40 | 9920.000M | 43.7 | +0.0 | 43.7 | 87.6 | -43.9 | None |
| | | | | | Hi Ch | | |
| 41 | 9785.000M | 43.6 | +0.0 | 43.6 | 87.6 | -44.0 | None |
| | | | | | Mid Ch | | |

| | | | | | | | |
|----|----------------|------|------|------|--------|-------|------|
| 42 | 10535.000 M | 43.5 | +0.0 | 43.5 | 87.6 | -44.1 | None |
| | | | | | Lo Ch | | |
| 43 | 135.700M | 43.4 | +0.0 | 43.4 | 87.6 | -44.2 | None |
| | | | | | Mid-Ch | | |
| 44 | 7130.000M | 43.1 | +0.0 | 43.1 | 87.6 | -44.5 | None |
| | | | | | Lo Ch | | |
| 45 | 7115.000M | 43.0 | +0.0 | 43.0 | 87.6 | -44.6 | None |
| | | | | | Mid-Ch | | |
| 46 | 9620.000M | 42.5 | +0.0 | 42.5 | 87.6 | -45.1 | None |
| | | | | | Lo Ch | | |
| 47 | 9777.500M | 41.6 | +0.0 | 41.6 | 87.6 | -46.0 | None |
| | | | | | Mid-Ch | | |
| 48 | 28.410M | 39.9 | +0.0 | 39.9 | 87.6 | -47.7 | None |
| | | | | | Mid Ch | | |
| 49 | 23.402M | 39.8 | +0.0 | 39.8 | 87.6 | -47.8 | None |
| | | | | | Lo Ch | | |
| 50 | 28.470M | 39.4 | +0.0 | 39.4 | 87.6 | -48.2 | None |
| | | | | | Hi-Ch | | |
| 51 | 2460.000M | 49.9 | +0.0 | 49.9 | 107.6 | -57.7 | None |
| | | | | | Lo Ch | | |

CKC Laboratories, Inc. Date: 2/3/2010 Time: 14:45:23 SynapSense, Inc. WO#: 90296
15.247(d) SynapSense Cond Spurious Test Distance: None Sequence#: 6 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Setup Photos



15.209/15.247(d) Spurious Radiated Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d)/15.209**
 Work Order #: **90296**
 Test Type: **Maximized Emissions**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-011
 S/N: NA

Date: 2/4/2010
 Time: 4:11:13 PM
 Sequence#: 9
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| EMCO Loop Antenna | 1074 | 04/10/2009 | 04/10/2011 | 00226 |
| 25' 26GHz cable | NA | 05/19/2009 | 05/19/2011 | 01012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Radiated Magnetic Field
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver. Vertical polarity is the worst case. 1/4 Wave dipole external antenna is connected. Antenna has a maximum gain of 2.2 dBi.
 Lo Ch is transmitting.
 Frequencies of interest .009-30 MHz
 55 ° Fahrenheit
 35% Relative Humidity
 Final BW settings
 RBW = 9 kHz
 VBW = 30kHz

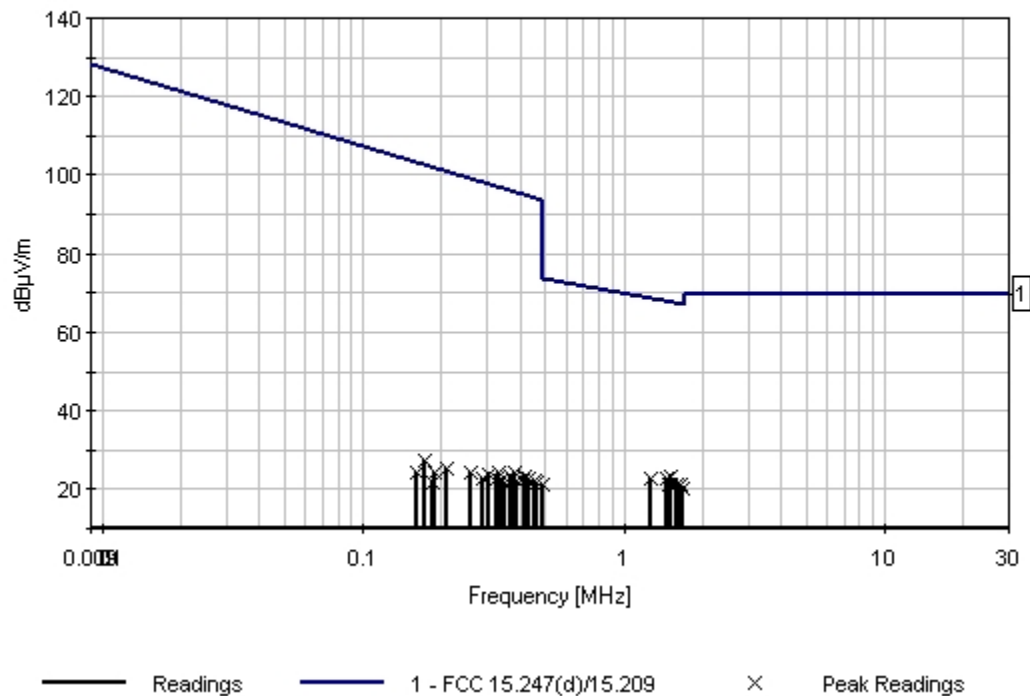
Transducer Legend:

| | |
|-----------------------------------|------------------------|
| T1=Mag Loop - AN 00226 - 9kHz-30M | T2=CAB-ANP01012-051909 |
|-----------------------------------|------------------------|

| Measurement Data: | | Reading listed by margin. | | | | Test Distance: 3 Meters | | | | | |
|--------------------------|-------------|---------------------------|----------|----------|--|-------------------------|---------------|----------------------|----------------------|--------------|--------------|
| # | Freq MHz | Rdng dB μ V | T1 dB | T2 dB | | | Dist Table | Corr dB μ V/m | Spec dB μ V/m | Margin dB | Polar Ant |
| 1 | 1.505M | 12.0 | +10.1 | +0.9 | | | +0.0 | 23.0 | 67.6 | -44.6 | Vert |
| 2 | 1.461M | 11.7 | +10.1 | +0.9 | | | +0.0 | 22.7 | 67.8 | -45.1 | Vert |
| 3 | 1.668M | 10.1 | +10.1 | +0.9 | | | +0.0 | 21.1 | 67.0 | -45.9 | Vert |
| 4 | 1.262M | 11.6 | +10.1 | +0.9 | | | +0.0 | 22.6 | 68.6 | -46.0 | Vert |
| 5 | 1.526M | 10.4 | +10.1 | +0.9 | | | +0.0 | 21.4 | 67.5 | -46.1 | Vert |
| 6 | 1.582M | 10.2 | +10.1 | +0.9 | | | +0.0 | 21.2 | 67.3 | -46.1 | Vert |
| 7 | 1.605M | 10.0 | +10.1 | +0.9 | | | +0.0 | 21.0 | 67.2 | -46.2 | Vert |
| 8 | 1.480M | 10.3 | +10.1 | +0.9 | | | +0.0 | 21.3 | 67.7 | -46.4 | Vert |
| 9 | 1.680M | 9.4 | +10.1 | +0.9 | | | +0.0 | 20.4 | 67.0 | -46.6 | Vert |
| 10 | 382.068k | 13.1 | +10.1 | +0.9 | | | +0.0 | 24.1 | 96.0 | -71.9 | Vert |
| 11 | 417.610k | 12.2 | +10.1 | +0.9 | | | +0.0 | 23.2 | 95.2 | -72.0 | Vert |
| 12 | 455.243k | 11.3 | +10.1 | +0.9 | | | +0.0 | 22.3 | 94.4 | -72.1 | Vert |
| 13 | 428.063k | 11.5 | +10.1 | +0.9 | | | +0.0 | 22.5 | 95.0 | -72.5 | Vert |
| 14 | 461.515k | 10.6 | +10.1 | +0.9 | | | +0.0 | 21.6 | 94.3 | -72.7 | Vert |
| 15 | 486.603k | 10.2 | +10.1 | +0.9 | | | +0.0 | 21.2 | 93.9 | -72.7 | Vert |
| 16 | 333.982k | 13.4 | +10.0 | +0.9 | | | +0.0 | 24.3 | 97.1 | -72.8 | Vert |
| 17 | 365.342k | 12.5 | +10.1 | +0.9 | | | +0.0 | 23.5 | 96.3 | -72.8 | Vert |
| 18 | 373.705k | 11.9 | +10.1 | +0.9 | | | +0.0 | 22.9 | 96.2 | -73.3 | Vert |
| 19 | 388.340k | 11.1 | +10.1 | +0.9 | | | +0.0 | 22.1 | 95.8 | -73.7 | Vert |
| 20 | 302.621k | 13.1 | +10.0 | +0.9 | | | +0.0 | 24.0 | 98.0 | -74.0 | Vert |
| 21 | 323.528k | 11.9 | +10.0 | +0.9 | | | +0.0 | 22.8 | 97.4 | -74.6 | Vert |
| 22 | 338.163k | 11.4 | +10.0 | +0.9 | | | +0.0 | 22.3 | 97.0 | -74.7 | Vert |
| 23 | 260.807k | 13.6 | +9.9 | +0.9 | | | +0.0 | 24.4 | 99.3 | -74.9 | Vert |

| | | | | | | | | | |
|----|----------|------|-------|------|------|------|-------|-------|------|
| 24 | 348.617k | 10.6 | +10.1 | +0.9 | +0.0 | 21.6 | 96.8 | -75.2 | Vert |
| 25 | 170.907k | 16.9 | +9.7 | +0.9 | +0.0 | 27.5 | 102.9 | -75.4 | Vert |
| 26 | 287.986k | 11.9 | +10.0 | +0.9 | +0.0 | 22.8 | 98.4 | -75.6 | Vert |
| 27 | 210.630k | 14.7 | +9.8 | +0.9 | +0.0 | 25.4 | 101.1 | -75.7 | Vert |
| 28 | 189.723k | 13.7 | +9.8 | +0.9 | +0.0 | 24.4 | 102.0 | -77.6 | Vert |
| 29 | 160.454k | 13.9 | +9.7 | +0.9 | +0.0 | 24.5 | 103.5 | -79.0 | Vert |
| 30 | 183.451k | 11.0 | +9.8 | +0.9 | +0.0 | 21.7 | 102.3 | -80.6 | Vert |

CKC Laboratories, Inc. Date: 2/4/2010 Time: 4:11:13 PM SynapSense, Inc. WFO#: 90296
FCC 15.247(d)/15.209 Test Distance: 3 Meters Sequence#: 9 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d)/15.209**
 Work Order #: **90296**
 Test Type: **Radiated Scan**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-011
 S/N: NA

Date: 2/4/2010
 Time: 4:20:03 PM
 Sequence#: 10
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| EMCO Loop Antenna | 1074 | 04/10/2009 | 04/10/2011 | 00226 |
| 25' 26GHz cable | NA | 05/19/2009 | 05/19/2011 | 01012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Radiated Magnetic Field
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver. Vertical polarity is the worst case. 1/4 Wave dipole external antenna is connected. Antenna has a maximum gain of 2.2 dBi.
 Mid Ch transmitting.
 Frequencies of interest .009-30 MHz
 55 ° Fahrenheit
 35% Relative Humidity
 Final BW settings
 RBW = 9 kHz
 VBW = 30kHz

Transducer Legend:

| | |
|-----------------------------------|------------------------|
| T1=Mag Loop - AN 00226 - 9kHz-30M | T2=CAB-ANP01012-051909 |
|-----------------------------------|------------------------|

Measurement Data:

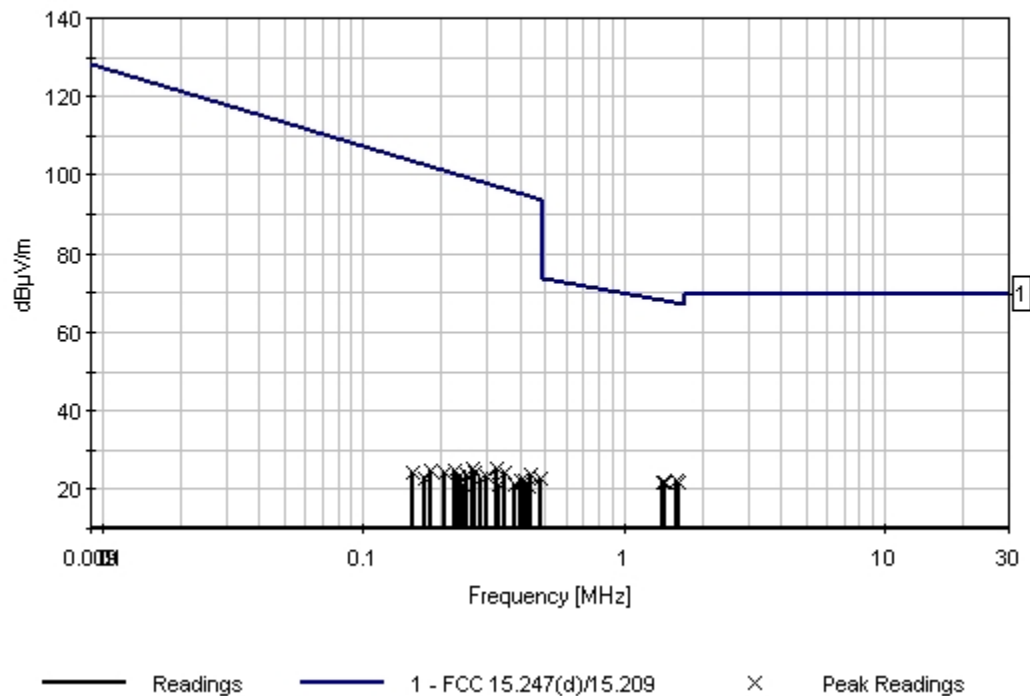
Reading listed by margin.

Test Distance: 3 Meters

| # | Freq MHz | Rdng dBμV | T1 dB | T2 dB | Dist Table | Corr dBμV/m | Spec dBμV/m | Margin dB | Polar Ant |
|---|-------------|--------------|----------|----------|---------------|----------------|----------------|--------------|--------------|
| 1 | 1.582M | 11.2 | +10.1 | +0.9 | +0.0 | 22.2 | 67.3 | -45.1 | Vert |
| 2 | 1.616M | 10.5 | +10.1 | +0.9 | +0.0 | 21.5 | 67.2 | -45.7 | Vert |
| 3 | 1.438M | 10.7 | +10.1 | +0.9 | +0.0 | 21.7 | 67.8 | -46.1 | Vert |
| 4 | 1.413M | 10.6 | +10.1 | +0.9 | +0.0 | 21.6 | 67.9 | -46.3 | Vert |
| 5 | 480.331k | 11.9 | +10.1 | +0.9 | +0.0 | 22.9 | 94.0 | -71.1 | Vert |

| | | | | | | | | | |
|----|----------|------|-------|------|------|------|-------|-------|------|
| 6 | 438.517k | 12.6 | +10.1 | +0.9 | +0.0 | 23.6 | 94.8 | -71.2 | Vert |
| 7 | 325.619k | 14.2 | +10.0 | +0.9 | +0.0 | 25.1 | 97.3 | -72.2 | Vert |
| 8 | 348.617k | 13.5 | +10.1 | +0.9 | +0.0 | 24.5 | 96.8 | -72.3 | Vert |
| 9 | 400.884k | 11.4 | +10.1 | +0.9 | +0.0 | 22.4 | 95.5 | -73.1 | Vert |
| 10 | 417.610k | 11.0 | +10.1 | +0.9 | +0.0 | 22.0 | 95.2 | -73.2 | Vert |
| 11 | 409.247k | 10.8 | +10.1 | +0.9 | +0.0 | 21.8 | 95.4 | -73.6 | Vert |
| 12 | 262.898k | 14.6 | +9.9 | +0.9 | +0.0 | 25.4 | 99.2 | -73.8 | Vert |
| 13 | 430.154k | 9.8 | +10.1 | +0.9 | +0.0 | 20.8 | 94.9 | -74.1 | Vert |
| 14 | 269.170k | 13.6 | +9.9 | +0.9 | +0.0 | 24.4 | 99.0 | -74.6 | Vert |
| 15 | 384.159k | 10.2 | +10.1 | +0.9 | +0.0 | 21.2 | 95.9 | -74.7 | Vert |
| 16 | 296.349k | 12.4 | +10.0 | +0.9 | +0.0 | 23.3 | 98.2 | -74.9 | Vert |
| 17 | 379.977k | 10.1 | +10.1 | +0.9 | +0.0 | 21.1 | 96.0 | -74.9 | Vert |
| 18 | 225.265k | 13.9 | +9.9 | +0.9 | +0.0 | 24.7 | 100.5 | -75.8 | Vert |
| 19 | 250.354k | 13.0 | +9.9 | +0.9 | +0.0 | 23.8 | 99.6 | -75.8 | Vert |
| 20 | 283.805k | 11.8 | +10.0 | +0.9 | +0.0 | 22.7 | 98.5 | -75.8 | Vert |
| 21 | 329.800k | 10.1 | +10.0 | +0.9 | +0.0 | 21.0 | 97.2 | -76.2 | Vert |
| 22 | 206.449k | 13.8 | +9.8 | +0.9 | +0.0 | 24.5 | 101.3 | -76.8 | Vert |
| 23 | 231.537k | 12.6 | +9.9 | +0.9 | +0.0 | 23.4 | 100.3 | -76.9 | Vert |
| 24 | 181.361k | 14.2 | +9.8 | +0.9 | +0.0 | 24.9 | 102.4 | -77.5 | Vert |
| 25 | 241.991k | 10.6 | +9.9 | +0.9 | +0.0 | 21.4 | 99.9 | -78.5 | Vert |
| 26 | 154.181k | 13.9 | +9.7 | +0.9 | +0.0 | 24.5 | 103.8 | -79.3 | Vert |
| 27 | 172.998k | 12.3 | +9.7 | +0.9 | +0.0 | 22.9 | 102.8 | -79.9 | Vert |

CKC Laboratories, Inc. Date: 2/4/2010 Time: 4:20:03 PM SynapSense, Inc. WFO#: 90296
 FCC 15.247(d)/15.209 Test Distance: 3 Meters Sequence#: 10 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d)/15.209**
 Work Order #: **90296**
 Test Type: **Radiated Scan**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-011
 S/N: NA

Date: 2/4/2010
 Time: 4:38:51 PM
 Sequence#: 11
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|------------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| 25' 26GHz cable | NA | 05/19/2009 | 05/19/2009 | N01012 |
| EMCO Loop Antenna 1074 | | 04/10/2009 | 04/10/2011 | 00226 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Radiated Magnetic Field
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver. Vertical polarity is the worst case. 1/4 Wave dipole external antenna is connected. Antenna has a maximum gain of 2.2 dBi.
 Hi Ch transmitting
 Frequencies of interest .009-30 MHz
 55 d° Fahrenheit
 35% Relative Humidity
 Final BW settings
 RBW = 9 kHz
 VBW = 30kHz

Transducer Legend:

| | |
|-----------------------------------|------------------------|
| T1=Mag Loop - AN 00226 - 9kHz-30M | T2=CAB-ANP01012-051909 |
|-----------------------------------|------------------------|

Measurement Data:

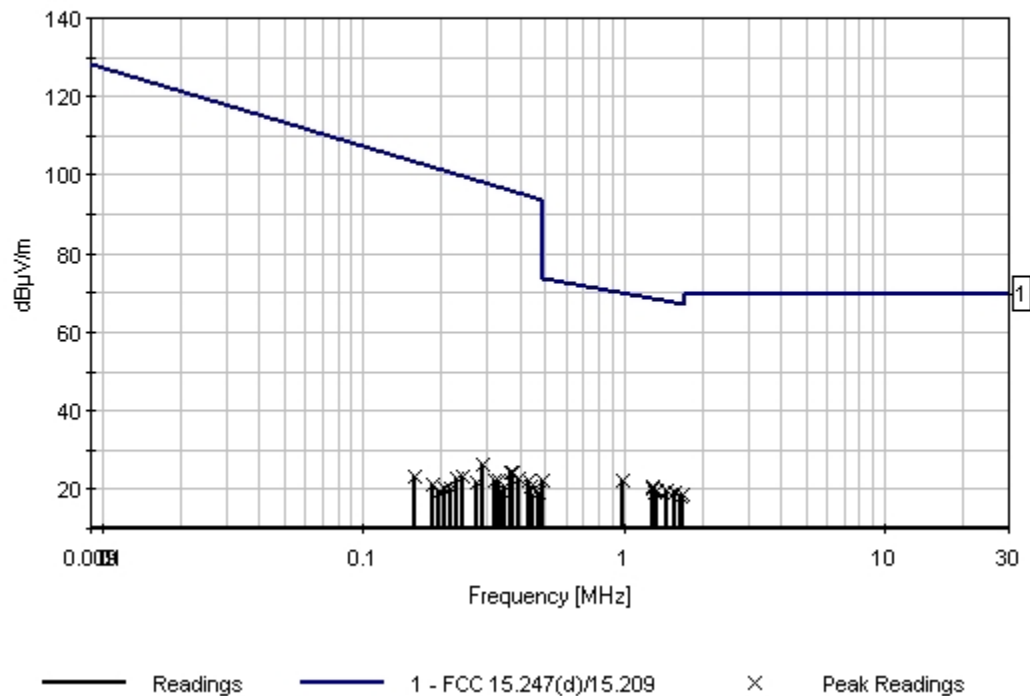
Reading listed by margin.

Test Distance: 3 Meters

| # | Freq MHz | Rdng dBμV | T1 dB | T2 dB | Dist Table | Corr dBμV/m | Spec dBμV/m | Margin dB | Polar Ant |
|---|-------------|--------------|----------|----------|---------------|----------------|----------------|--------------|--------------|
| 1 | 1.292M | 9.6 | +10.1 | +0.9 | +0.0 | 20.6 | 68.4 | -47.8 | Vert |
| 2 | 988.372k | 10.9 | +10.2 | +0.9 | +0.0 | 22.0 | 69.9 | -47.9 | Vert |
| 3 | 1.559M | 8.4 | +10.1 | +0.9 | +0.0 | 19.4 | 67.4 | -48.0 | Vert |
| 4 | 1.467M | 8.6 | +10.1 | +0.9 | +0.0 | 19.6 | 67.7 | -48.1 | Vert |
| 5 | 1.300M | 9.2 | +10.1 | +0.9 | +0.0 | 20.2 | 68.4 | -48.2 | Vert |

| | | | | | | | | | |
|----|----------|------|-------|------|------|------|-------|-------|------|
| 6 | 1.682M | 7.7 | +10.1 | +0.9 | +0.0 | 18.7 | 67.0 | -48.3 | Vert |
| 7 | 1.335M | 8.8 | +10.1 | +0.9 | +0.0 | 19.8 | 68.3 | -48.5 | Vert |
| 8 | 1.325M | 8.4 | +10.1 | +0.9 | +0.0 | 19.4 | 68.3 | -48.9 | Vert |
| 9 | 1.657M | 7.1 | +10.1 | +0.9 | +0.0 | 18.1 | 67.1 | -49.0 | Vert |
| 10 | 488.694k | 11.1 | +10.1 | +0.9 | +0.0 | 22.1 | 93.8 | -71.7 | Vert |
| 11 | 375.796k | 13.3 | +10.1 | +0.9 | +0.0 | 24.3 | 96.1 | -71.8 | Vert |
| 12 | 369.524k | 13.3 | +10.1 | +0.9 | +0.0 | 24.3 | 96.2 | -71.9 | Vert |
| 13 | 287.986k | 15.3 | +10.0 | +0.9 | +0.0 | 26.2 | 98.4 | -72.2 | Vert |
| 14 | 396.703k | 11.9 | +10.1 | +0.9 | +0.0 | 22.9 | 95.6 | -72.7 | Vert |
| 15 | 428.063k | 11.2 | +10.1 | +0.9 | +0.0 | 22.2 | 95.0 | -72.8 | Vert |
| 16 | 440.608k | 9.7 | +10.1 | +0.9 | +0.0 | 20.7 | 94.7 | -74.0 | Vert |
| 17 | 469.877k | 8.4 | +10.1 | +0.9 | +0.0 | 19.4 | 94.2 | -74.8 | Vert |
| 18 | 329.800k | 11.3 | +10.0 | +0.9 | +0.0 | 22.2 | 97.2 | -75.0 | Vert |
| 19 | 319.347k | 11.5 | +10.0 | +0.9 | +0.0 | 22.4 | 97.5 | -75.1 | Vert |
| 20 | 451.061k | 7.6 | +10.1 | +0.9 | +0.0 | 18.6 | 94.5 | -75.9 | Vert |
| 21 | 346.526k | 9.6 | +10.1 | +0.9 | +0.0 | 20.6 | 96.8 | -76.2 | Vert |
| 22 | 239.900k | 12.4 | +9.9 | +0.9 | +0.0 | 23.2 | 100.0 | -76.8 | Vert |
| 23 | 271.261k | 10.9 | +10.0 | +0.9 | +0.0 | 21.8 | 98.9 | -77.1 | Vert |
| 24 | 227.356k | 12.0 | +9.9 | +0.9 | +0.0 | 22.8 | 100.5 | -77.7 | Vert |
| 25 | 340.254k | 8.2 | +10.0 | +0.9 | +0.0 | 19.1 | 97.0 | -77.9 | Vert |
| 26 | 156.272k | 12.7 | +9.7 | +0.9 | +0.0 | 23.3 | 103.7 | -80.4 | Vert |
| 27 | 216.903k | 9.5 | +9.8 | +0.9 | +0.0 | 20.2 | 100.9 | -80.7 | Vert |
| 28 | 185.542k | 10.5 | +9.8 | +0.9 | +0.0 | 21.2 | 102.2 | -81.0 | Vert |
| 29 | 206.449k | 9.6 | +9.8 | +0.9 | +0.0 | 20.3 | 101.3 | -81.0 | Vert |
| 30 | 193.905k | 8.3 | +9.8 | +0.9 | +0.0 | 19.0 | 101.8 | -82.8 | Vert |

CKC Laboratories, Inc. Date: 2/4/2010 Time: 4:38:51 PM SynapSense, Inc. WFO#: 90296
 FCC 15.247(d)/15.209 Test Distance: 3 Meters Sequence#: 11 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d)/15.209**
 Work Order #: **90296**
 Test Type: **Maximized Emissions**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-011
 S/N: NA

Date: 2/5/2010
 Time: 12:44:20
 Sequence#: 16
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-----------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| Bilog Antenna | 2455 | 09/10/2009 | 09/10/2011 | AN01992 |
| HP-8447D Preamp | 2727A05444 | 06/20/2008 | 06/20/2010 | AN00062 |
| Ans Cable | NA | 01/26/2010 | 01/26/2012 | AN03013 |
| Andrew-25' | NA | 05/19/2009 | 05/19/2011 | AN01012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d)/15.205/209 Spurious emissions
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver.
 Frequencies of interest 30 -1000 MHz
 70 ° Fahrenheit
 35% Relative Humidity
 Tx is transmitting on frequencies: 2405 MHz, 2445 MHz, & 2480 MHz
 Module is in Vertical position, atop foam, 80 cm from ground plane with the external antenna. Antenna has a maximum gain of 2.2 dBi.
 Final BWs:
 RBW=120kHz
 VBW=360kHz

Transducer Legend:

| | |
|------------------------|----------------------------------|
| T1=AMP-AN00062-062008 | T2=ANT-AN01992-100909 25-1000MHz |
| T3=CAB-ANP01012-051909 | T4=CAB-AN03013-40GHZ-3FT |

Measurement Data:

Reading listed by margin.

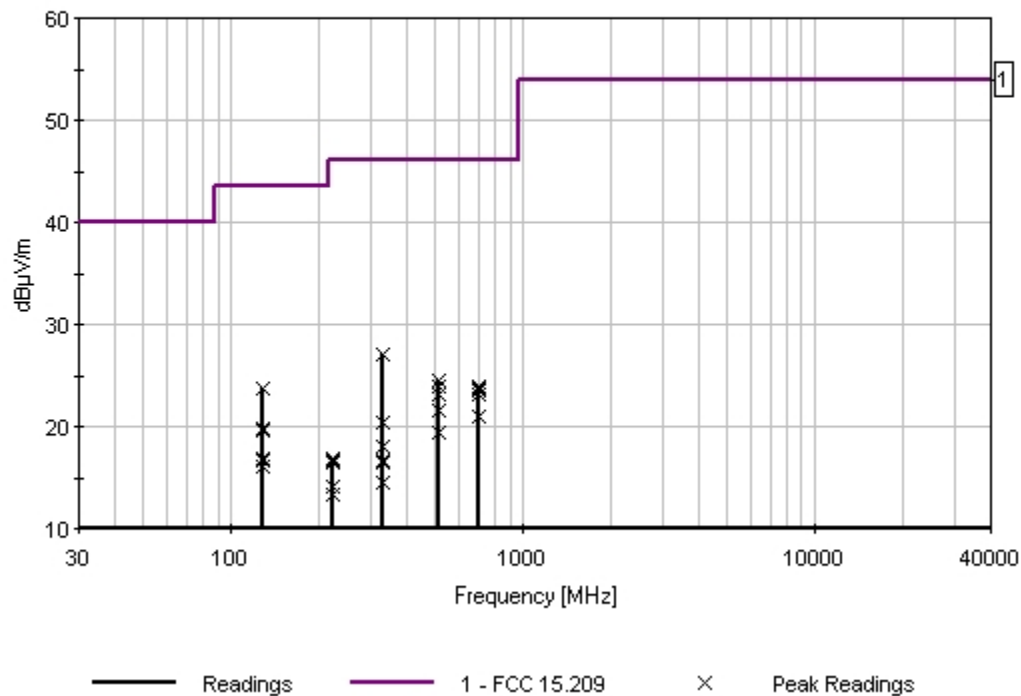
Test Distance: 3 Meters

| # | 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 | 330.000M | 40.7 | -29.8 | +14.6 | +1.3 | +0.3 | +0.0 | 27.1 | 46.0 Lo Ch | -18.9 | Vert |
| 2 | 127.995M | 41.4 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 23.7 | 43.5 Lo Ch | -19.8 | Vert |
| 3 | 511.828M | 34.5 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 24.5 | 46.0 Mid Ch | -21.5 | Vert |

| | | | | | | | | | | | |
|----|----------|------|-------|-------|------|------|------|------|----------------|-------|-------|
| 4 | 703.870M | 31.0 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 24.0 | 46.0 Hi Ch | -22.0 | Vert |
| 5 | 511.888M | 34.0 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 24.0 | 46.0 Hi Ch | -22.0 | Vert |
| 6 | 511.914M | 34.0 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 24.0 | 46.0 Mid Ch | -22.0 | Horiz |
| 7 | 703.890M | 30.8 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 23.8 | 46.0 Mid Ch | -22.2 | Vert |
| 8 | 703.900M | 30.6 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 23.6 | 46.0 Mid Ch | -22.4 | Horiz |
| 9 | 703.906M | 30.5 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 23.5 | 46.0 Lo Ch | -22.5 | Horiz |
| 10 | 703.842M | 30.2 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 23.2 | 46.0 | -22.8 | Horiz |
| 11 | 511.795M | 33.2 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 23.2 | 46.0 | -22.8 | Horiz |
| 12 | 128.072M | 37.5 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 19.8 | 43.5 Mid Ch | -23.7 | Horiz |
| 13 | 128.059M | 37.3 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 19.6 | 43.5 | -23.9 | Horiz |
| 14 | 511.961M | 31.6 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 21.6 | 46.0 Lo Ch | -24.4 | Horiz |
| 15 | 511.920M | 31.5 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 21.5 | 46.0 Lo Ch | -24.5 | Horiz |
| 16 | 704.000M | 27.9 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 20.9 | 46.0 Lo Ch | -25.1 | Vert |
| 17 | 330.258M | 34.0 | -29.8 | +14.6 | +1.3 | +0.3 | +0.0 | 20.4 | 46.0 Mid Ch | -25.6 | Horiz |
| 18 | 512.000M | 29.5 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 19.5 | 46.0 Lo Ch | -26.5 | Vert |
| 19 | 127.966M | 34.6 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 16.9 | 43.5 Hi Ch | -26.6 | Vert |
| 20 | 128.020M | 34.4 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 16.7 | 43.5 Mid Ch | -26.8 | Vert |
| 21 | 127.935M | 33.8 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 16.1 | 43.5 Lo Ch | -27.4 | Horiz |
| 22 | 330.375M | 31.7 | -29.8 | +14.6 | +1.3 | +0.3 | +0.0 | 18.1 | 46.0 | -27.9 | Horiz |
| 23 | 224.003M | 34.4 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 16.8 | 46.0 Lo Ch | -29.2 | Horiz |
| 24 | 223.993M | 34.3 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 16.7 | 46.0 | -29.3 | Horiz |
| 25 | 330.277M | 30.2 | -29.8 | +14.6 | +1.3 | +0.3 | +0.0 | 16.6 | 46.0 Hi Ch | -29.4 | Vert |
| 26 | 330.276M | 30.1 | -29.8 | +14.6 | +1.3 | +0.3 | +0.0 | 16.5 | 46.0 Mid Ch | -29.5 | Vert |
| 27 | 224.016M | 34.0 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 16.4 | 46.0 Mid Ch | -29.6 | Horiz |

| | | | | | | | | | | | |
|----|----------|------|-------|-------|------|------|------|------|--------|-------|-------|
| 28 | 330.237M | 28.2 | -29.8 | +14.6 | +1.3 | +0.3 | +0.0 | 14.6 | 46.0 | -31.4 | Horiz |
| | | | | | | | | | Lo Ch | | |
| 29 | 223.933M | 31.8 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 14.2 | 46.0 | -31.8 | Vert |
| | | | | | | | | | Hi Ch | | |
| 30 | 223.941M | 31.0 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 13.4 | 46.0 | -32.6 | Vert |
| | | | | | | | | | Mid Ch | | |
| 31 | 224.000M | 31.0 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 13.4 | 46.0 | -32.6 | Vert |
| | | | | | | | | | Lo Ch | | |

CKC Laboratories, Inc. Date: 2/5/2010 Time: 12:44:20 SynapSense, Inc. W/O#: 90296
FCC 15.209 Test Distance: 3 Meters Sequence#: 16 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240
 Customer: Synapsense Corporation
 Specification: FCC 15.247(d) / 15.209
 Work Order #: 90296
 Test Type: Maximized Emissions
 Equipment: SynapStamp Radio Module
 Manufacturer: Synapsense Corporation
 Model: 11-0606-011
 S/N: NA

Date: 2/10/2010
 Time: 13:52:03
 Sequence#: 14
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-----------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| Andrew-25' | NA | 05/19/2009 | 05/19/2011 | AN01012 |
| Horn Antenna | 3413 | 06/06/2008 | 06/06/2010 | AN00327 |
| HP Preamp 83017A | 000009031 | 07/17/2009 | 07/17/2011 | 3155 |
| Ans Cable | NA | 01/26/2010 | 01/26/2012 | AN03012 |
| Horn Antenna 18-26GHz | 01005 | 11/13/2008 | 11/13/2010 | AN02046 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

| |
|---|
| 15.247(d)/15.209/205 Spurious Emissions-RE Tested with receiver activated to meet FCC 15.109 requirements New batteries installed in +5dBm transceiver. Frequencies of interest 1-25 GHz 58 ° Fahrenheit 35% Relative Humidity Tx is transmitting on frequencies: 2405 MHz, 2445 MHz, & 2480 MHz Module is atop foam, 80 cm from ground plane with the external antenna. Antenna has a maximum gain of 2.2 dBi. Test distance is at 3m. Final BWs: RBW=1 MHz VBW=3 MHz |
|---|

Transducer Legend:

| | |
|---------------------------|---------------------------|
| T1=CAB-ANP01012-051909 | T2=Amp AN03155 to 26.5GHz |
| T3=ANT AN00327 1GHz-18GHz | T4=CAB-AN03012-40GHZ-3FT |

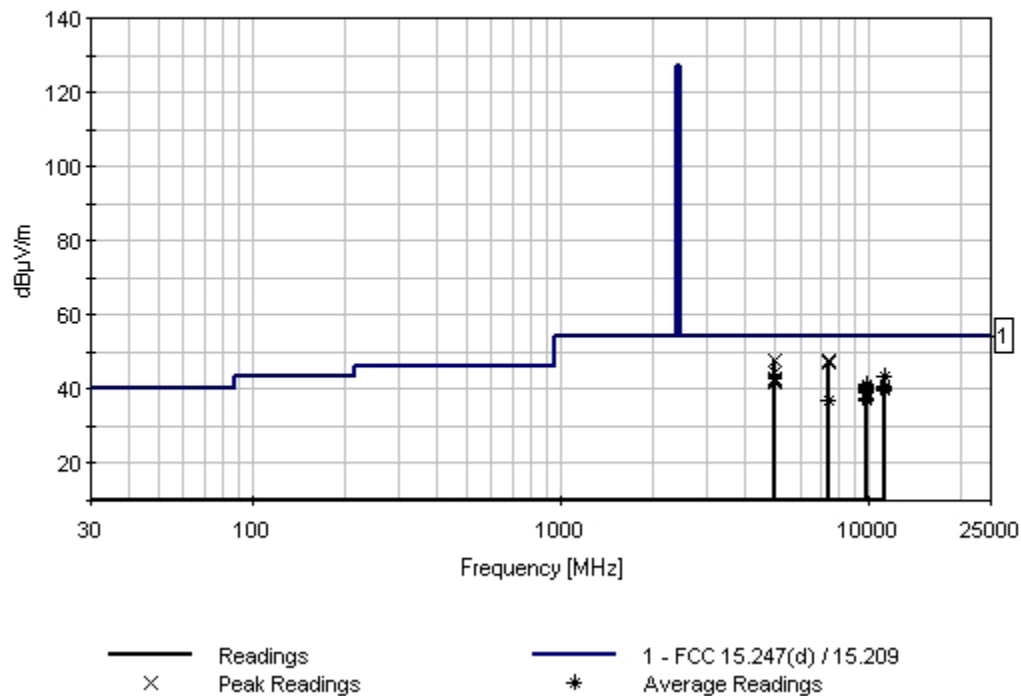
Measurement Data: Reading listed by margin. Test Distance: 3 Meters

| # | 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 | 4959.500M | 43.8 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 47.8 | 54.0 Hi Ch | -6.2 | Horiz |
| 2 | 7421.966M | 40.8 | +3.6 | -33.6 | +36.0 | +1.0 | +0.0 | 47.8 | 54.0 Mid Ch | -6.2 | Horiz |
| 3 | 7423.500M | 40.5 | +3.6 | -33.6 | +36.1 | +1.0 | +0.0 | 47.6 | 54.0 Hi Ch | -6.4 | Horiz |

| | | | | | | | | | | | |
|----|----------------|------|------|-------|-------|------|------|------|--------|-------|-------|
| 4 | 7422.991M | 40.5 | +3.6 | -33.6 | +36.1 | +1.0 | +0.0 | 47.6 | 54.0 | -6.4 | Horiz |
| | | | | | | | | | Lo Ch | | |
| 5 | 7421.970M | 40.3 | +3.6 | -33.6 | +36.0 | +1.0 | +0.0 | 47.3 | 54.0 | -6.7 | Horiz |
| | | | | | | | | | Mid CH | | |
| 6 | 7422.478M | 40.0 | +3.6 | -33.6 | +36.0 | +1.0 | +0.0 | 47.0 | 54.0 | -7.0 | Vert |
| | | | | | | | | | Lo Ch | | |
| 7 | 4960.000M | 40.3 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 44.3 | 54.0 | -9.7 | Vert |
| | | | | | | | | | Hi Ch | | |
| 8 | 11364.900 M | 33.2 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 43.7 | 54.0 | -10.3 | Horiz |
| | Ave | | | | | | | | Hi Ch | | |
| ^ | 11364.900 M | 39.6 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 50.1 | 54.0 | -3.9 | Horiz |
| | | | | | | | | | Hi Ch | | |
| 10 | 11365.000 M | 32.8 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 43.3 | 54.0 | -10.7 | Vert |
| | Ave | | | | | | | | Hi Ch | | |
| ^ | 11365.000 M | 40.1 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 50.6 | 54.0 | -3.4 | Vert |
| | | | | | | | | | Hi Ch | | |
| 12 | 4958.483M | 39.0 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 43.0 | 54.0 | -11.0 | Vert |
| | | | | | | | | | Lo Ch | | |
| 13 | 4957.977M | 38.4 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 42.4 | 54.0 | -11.6 | Horiz |
| | | | | | | | | | Mid Ch | | |
| 14 | 4958.991M | 38.3 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 42.3 | 54.0 | -11.7 | Horiz |
| | | | | | | | | | Lo Ch | | |
| 15 | 4957.967M | 37.9 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 41.9 | 54.0 | -12.1 | Horiz |
| | | | | | | | | | Mid CH | | |
| 16 | 9918.482M | 30.6 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 41.1 | 54.0 | -12.9 | Horiz |
| | Ave | | | | | | | | Lo Ch | | |
| 17 | 9918.990M | 30.4 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 40.9 | 54.0 | -13.1 | Horiz |
| | Ave | | | | | | | | Mid Ch | | |
| ^ | 9918.990M | 38.2 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 48.7 | 54.0 | -5.3 | Horiz |
| | | | | | | | | | Lo Ch | | |
| 19 | 11364.390 M | 30.3 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 40.8 | 54.0 | -13.2 | Horiz |
| | Ave | | | | | | | | Mid CH | | |
| ^ | 11364.390 M | 39.4 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 49.9 | 54.0 | -4.1 | Horiz |
| | | | | | | | | | Lo Ch | | |
| 21 | 11363.360 M | 30.1 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 40.6 | 54.0 | -13.4 | Horiz |
| | Ave | | | | | | | | Mid Ch | | |
| ^ | 11363.360 M | 39.6 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 50.1 | 54.0 | -3.9 | Horiz |
| | | | | | | | | | Mid Ch | | |
| 23 | 9920.000M | 30.0 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 40.5 | 54.0 | -13.5 | Vert |
| | Ave | | | | | | | | Hi Ch | | |
| ^ | 9920.000M | 38.4 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 48.9 | 54.0 | -5.1 | Vert |
| | | | | | | | | | Hi Ch | | |
| 25 | 9918.482M | 29.5 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 40.0 | 54.0 | -14.0 | Vert |
| | Ave | | | | | | | | Hi Ch | | |

| | | | | | | | | | | | |
|----|-----------------------|------|------|-------|-------|------|------|------|--------|-------|-------|
| ^ | 9918.482M | 38.5 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 49.0 | 54.0 | -5.0 | Vert |
| | | | | | | | | | Lo Ch | | |
| 27 | 11362.850 M Ave | 29.5 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 40.0 | 54.0 | -14.0 | Horiz |
| | | | | | | | | | Mid Ch | | |
| ^ | 11362.850 M | 39.1 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 49.6 | 54.0 | -4.4 | Horiz |
| | | | | | | | | | Mid CH | | |
| 29 | 9917.969M Ave | 29.4 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 39.9 | 54.0 | -14.1 | Horiz |
| | | | | | | | | | Mid Ch | | |
| ^ | 9917.969M | 38.3 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 48.8 | 54.0 | -5.2 | Horiz |
| | | | | | | | | | Mid Ch | | |
| 31 | 11363.880 M Ave | 29.3 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 39.8 | 54.0 | -14.2 | Vert |
| | | | | | | | | | Lo Ch | | |
| ^ | 11363.880 M | 39.0 | +4.6 | -33.9 | +38.6 | +1.2 | +0.0 | 49.5 | 54.0 | -4.5 | Vert |
| | | | | | | | | | Lo Ch | | |
| 33 | 9917.459M Ave | 28.4 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 38.9 | 54.0 | -15.1 | Horiz |
| | | | | | | | | | Hi Ch | | |
| ^ | 9917.459M | 38.8 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 49.3 | 54.0 | -4.7 | Horiz |
| | | | | | | | | | Mid CH | | |
| 35 | 9917.095M Ave | 27.0 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 37.5 | 54.0 | -16.5 | Horiz |
| | | | | | | | | | Mid CH | | |
| 36 | 9919.499M Ave | 26.6 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 37.1 | 54.0 | -16.9 | Horiz |
| | | | | | | | | | Lo Ch | | |
| ^ | 9919.499M | 38.7 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 49.2 | 54.0 | -4.8 | Horiz |
| | | | | | | | | | Hi Ch | | |
| 38 | 7424.000M Ave | 29.8 | +3.6 | -33.6 | +36.1 | +1.0 | +0.0 | 36.9 | 54.0 | -17.1 | Vert |
| | | | | | | | | | Hi Ch | | |
| ^ | 7424.000M | 41.7 | +3.6 | -33.6 | +36.1 | +1.0 | +0.0 | 48.8 | 54.0 | -5.2 | Vert |
| | | | | | | | | | Hi Ch | | |

CKC Laboratories, Inc. Date: 2/10/2010 Time: 13:52:03 SynapSense, Inc. WO#: 90296
 FCC 15.247(d) / 15.209 Test Distance: 3 Meters Sequence#: 14 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d)/15.209**
 Work Order #: **90296**
 Test Type: **Radiated Scan**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-001
 S/N: NA

Date: 2/4/2010
 Time: 4:45:56 PM
 Sequence#: 13
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| EMCO Loop Antenna | 1074 | 04/10/2009 | 04/10/2011 | 00226 |
| 25' 26GHz cable | NA | 05/19/2009 | 05/19/2011 | 01012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-001 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Radiated Magnetic Field
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver. Vertical polarity is the worst case. Integral antenna now connected..
 Antenna has a maximum gain of 2.2 dBi.
 Lo Ch transmitting.
 Frequencies of interest .009-30 MHz
 55 °Fahrenheit
 35% Relative Humidity
 Final BW settings
 RBW = 9 kHz & 200Hz
 VBW = 30kHz

Transducer Legend:

| | |
|-----------------------------------|------------------------|
| T1=Mag Loop - AN 00226 - 9kHz-30M | T2=CAB-ANP01012-051909 |
|-----------------------------------|------------------------|

Measurement Data:

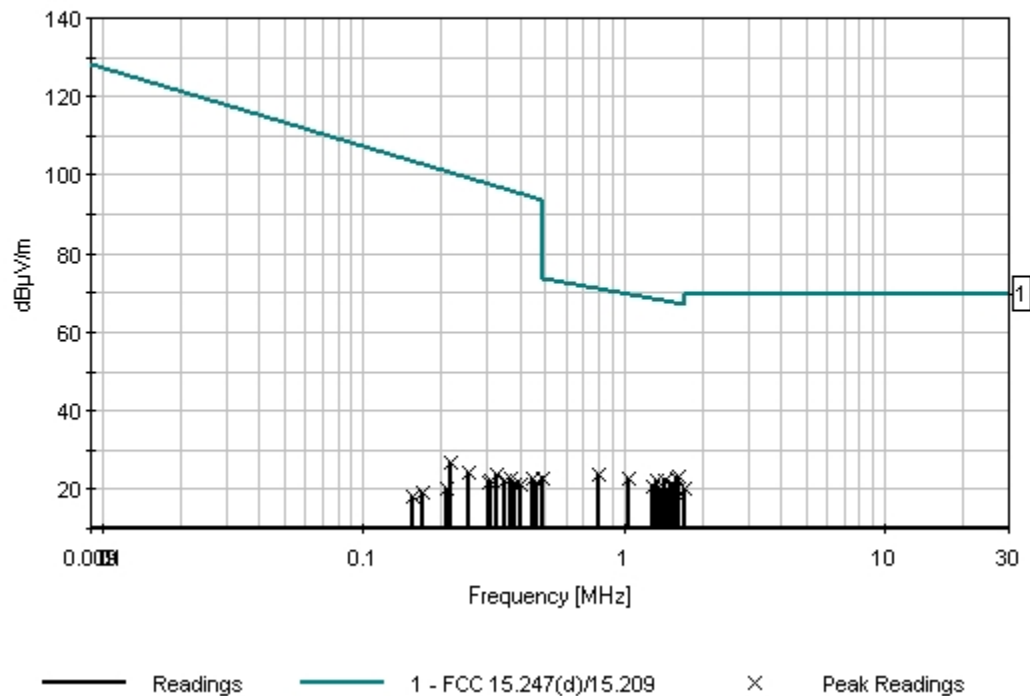
Reading listed by margin.

Test Distance: 3 Meters

| # | Freq MHz | Rdng dBμV | T1 dB | T2 dB | Dist Table | Corr dBμV/m | Spec dBμV/m | Margin dB | Polar Ant |
|---|-------------|--------------|----------|----------|---------------|----------------|----------------|--------------|--------------|
| 1 | 1.616M | 12.2 | +10.1 | +0.9 | +0.0 | 23.2 | 67.2 | -44.0 | Vert |
| 2 | 1.595M | 11.8 | +10.1 | +0.9 | +0.0 | 22.8 | 67.3 | -44.5 | Vert |
| 3 | 1.342M | 11.4 | +10.1 | +0.9 | +0.0 | 22.4 | 68.2 | -45.8 | Vert |
| 4 | 1.442M | 11.0 | +10.1 | +0.9 | +0.0 | 22.0 | 67.8 | -45.8 | Vert |
| 5 | 1.530M | 10.3 | +10.1 | +0.9 | +0.0 | 21.3 | 67.5 | -46.2 | Vert |

| | | | | | | | | | |
|----|----------|------|-------|------|------|------|-------|-------|------|
| 6 | 1.513M | 10.1 | +10.1 | +0.9 | +0.0 | 21.1 | 67.6 | -46.5 | Vert |
| 7 | 1.043M | 11.7 | +10.2 | +0.9 | +0.0 | 22.8 | 69.6 | -46.8 | Vert |
| 8 | 1.699M | 9.0 | +10.1 | +0.9 | +0.0 | 20.0 | 66.9 | -46.9 | Vert |
| 9 | 806.480k | 12.7 | +10.3 | +0.9 | +0.0 | 23.9 | 71.0 | -47.1 | Vert |
| 10 | 1.379M | 9.4 | +10.1 | +0.9 | +0.0 | 20.4 | 68.1 | -47.7 | Vert |
| 11 | 1.396M | 9.3 | +10.1 | +0.9 | +0.0 | 20.3 | 68.0 | -47.7 | Vert |
| 12 | 1.300M | 9.5 | +10.1 | +0.9 | +0.0 | 20.5 | 68.4 | -47.9 | Vert |
| 13 | 1.411M | 8.3 | +10.1 | +0.9 | +0.0 | 19.3 | 67.9 | -48.6 | Vert |
| 14 | 1.639M | 7.1 | +10.1 | +0.9 | +0.0 | 18.1 | 67.1 | -49.0 | Vert |
| 15 | 1.476M | 7.6 | +10.1 | +0.9 | +0.0 | 18.6 | 67.7 | -49.1 | Vert |
| 16 | 486.603k | 11.7 | +10.1 | +0.9 | +0.0 | 22.7 | 93.9 | -71.2 | Vert |
| 17 | 451.061k | 11.9 | +10.1 | +0.9 | +0.0 | 22.9 | 94.5 | -71.6 | Vert |
| 18 | 465.696k | 10.6 | +10.1 | +0.9 | +0.0 | 21.6 | 94.2 | -72.6 | Vert |
| 19 | 323.528k | 12.9 | +10.0 | +0.9 | +0.0 | 23.8 | 97.4 | -73.6 | Vert |
| 20 | 365.342k | 11.7 | +10.1 | +0.9 | +0.0 | 22.7 | 96.3 | -73.6 | Vert |
| 21 | 216.903k | 16.1 | +9.8 | +0.9 | +0.0 | 26.8 | 100.9 | -74.1 | Vert |
| 22 | 405.066k | 10.1 | +10.1 | +0.9 | +0.0 | 21.1 | 95.5 | -74.4 | Vert |
| 23 | 348.617k | 11.1 | +10.1 | +0.9 | +0.0 | 22.1 | 96.8 | -74.7 | Vert |
| 24 | 379.977k | 10.3 | +10.1 | +0.9 | +0.0 | 21.3 | 96.0 | -74.7 | Vert |
| 25 | 252.444k | 13.7 | +9.9 | +0.9 | +0.0 | 24.5 | 99.6 | -75.1 | Vert |
| 26 | 310.984k | 11.3 | +10.0 | +0.9 | +0.0 | 22.2 | 97.7 | -75.5 | Vert |
| 27 | 302.621k | 10.8 | +10.0 | +0.9 | +0.0 | 21.7 | 98.0 | -76.3 | Vert |
| 28 | 208.540k | 9.6 | +9.8 | +0.9 | +0.0 | 20.3 | 101.2 | -80.9 | Vert |
| 29 | 168.816k | 8.6 | +9.7 | +0.9 | +0.0 | 19.2 | 103.1 | -83.9 | Vert |
| 30 | 154.181k | 7.8 | +9.7 | +0.9 | +0.0 | 18.4 | 103.8 | -85.4 | Vert |

CKC Laboratories, Inc. Date: 2/4/2010 Time: 4:45:56 PM SynapSense, Inc. W/O#: 90296
 FCC 15.247(d)/15.209 Test Distance: 3 Meters Sequence#: 13 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d)/15.209**
 Work Order #: **90296**
 Test Type: **Radiated Scan**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-001
 S/N: NA

Date: 2/4/2010
 Time: 4:47:58 PM
 Sequence#: 14
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| EMCO Loop Antenna | 1074 | 04/10/2009 | 04/10/2011 | 00226 |
| 25' 26GHz cable | NA | 05/19/2009 | 05/19/2011 | 01012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-001 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Radiated Magnetic Field
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver. Vertical polarity is the worst case. Integral antenna now connected..
 Mid Ch is transmitting. Antenna has a maximum gain of 2.2 dBi.
 Frequencies of interest .009-30 MHz
 55 °Fahrenheit
 35% Relative Humidity
 Final BW settings
 RBW = 9 kHz & 200Hz
 VBW = 30kHz

Transducer Legend:

| | |
|-----------------------------------|------------------------|
| T1=Mag Loop - AN 00226 - 9kHz-30M | T2=CAB-ANP01012-051909 |
|-----------------------------------|------------------------|

Measurement Data:

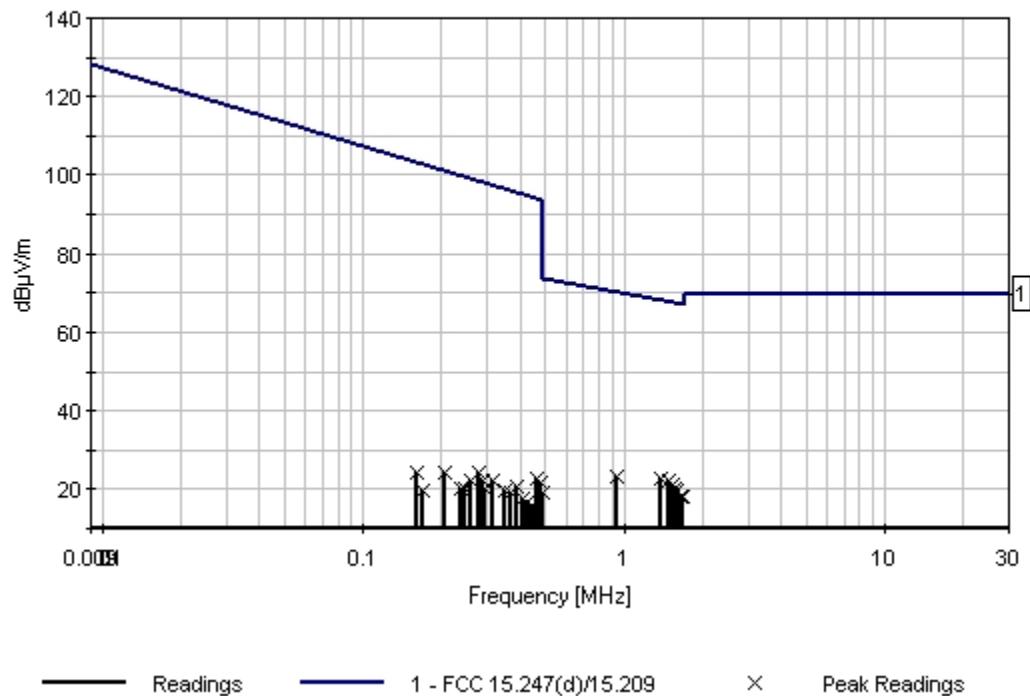
Reading listed by margin.

Test Distance: 3 Meters

| # | Freq MHz | Rdng dBμV | T1 dB | T2 dB | Dist Table | Corr dBμV/m | Spec dBμV/m | Margin dB | Polar Ant |
|---|-------------|--------------|----------|----------|---------------|----------------|----------------|--------------|--------------|
| 1 | 1.396M | 11.9 | +10.1 | +0.9 | +0.0 | 22.9 | 68.0 | -45.1 | Vert |
| 2 | 1.482M | 11.4 | +10.1 | +0.9 | +0.0 | 22.4 | 67.7 | -45.3 | Vert |
| 3 | 1.549M | 10.2 | +10.1 | +0.9 | +0.0 | 21.2 | 67.4 | -46.2 | Vert |
| 4 | 1.540M | 10.0 | +10.1 | +0.9 | +0.0 | 21.0 | 67.5 | -46.5 | Vert |
| 5 | 940.285k | 12.1 | +10.3 | +0.9 | +0.0 | 23.3 | 70.2 | -46.9 | Vert |

| | | | | | | | | | |
|----|----------|------|-------|------|------|------|-------|-------|------|
| 6 | 1.565M | 9.4 | +10.1 | +0.9 | +0.0 | 20.4 | 67.4 | -47.0 | Vert |
| 7 | 1.595M | 8.9 | +10.1 | +0.9 | +0.0 | 19.9 | 67.3 | -47.4 | Vert |
| 8 | 1.607M | 8.7 | +10.1 | +0.9 | +0.0 | 19.7 | 67.2 | -47.5 | Vert |
| 9 | 1.685M | 7.4 | +10.1 | +0.9 | +0.0 | 18.4 | 67.0 | -48.6 | Vert |
| 10 | 1.659M | 7.2 | +10.1 | +0.9 | +0.0 | 18.2 | 67.0 | -48.8 | Vert |
| 11 | 461.515k | 11.7 | +10.1 | +0.9 | +0.0 | 22.7 | 94.3 | -71.6 | Vert |
| 12 | 482.422k | 10.8 | +10.1 | +0.9 | +0.0 | 21.8 | 93.9 | -72.1 | Vert |
| 13 | 275.442k | 13.3 | +10.0 | +0.9 | +0.0 | 24.2 | 98.8 | -74.6 | Vert |
| 14 | 488.694k | 8.0 | +10.1 | +0.9 | +0.0 | 19.0 | 93.8 | -74.8 | Vert |
| 15 | 388.340k | 9.7 | +10.1 | +0.9 | +0.0 | 20.7 | 95.8 | -75.1 | Vert |
| 16 | 313.075k | 11.4 | +10.0 | +0.9 | +0.0 | 22.3 | 97.7 | -75.4 | Vert |
| 17 | 287.986k | 11.3 | +10.0 | +0.9 | +0.0 | 22.2 | 98.4 | -76.2 | Vert |
| 18 | 204.358k | 13.7 | +9.8 | +0.9 | +0.0 | 24.4 | 101.4 | -77.0 | Vert |
| 19 | 350.707k | 8.5 | +10.1 | +0.9 | +0.0 | 19.5 | 96.7 | -77.2 | Vert |
| 20 | 258.717k | 11.2 | +9.9 | +0.9 | +0.0 | 22.0 | 99.3 | -77.3 | Vert |
| 21 | 367.433k | 8.0 | +10.1 | +0.9 | +0.0 | 19.0 | 96.3 | -77.3 | Vert |
| 22 | 407.156k | 6.8 | +10.1 | +0.9 | +0.0 | 17.8 | 95.4 | -77.6 | Vert |
| 23 | 294.258k | 9.4 | +10.0 | +0.9 | +0.0 | 20.3 | 98.2 | -77.9 | Vert |
| 24 | 425.973k | 5.8 | +10.1 | +0.9 | +0.0 | 16.8 | 95.0 | -78.2 | Vert |
| 25 | 444.789k | 4.7 | +10.1 | +0.9 | +0.0 | 15.7 | 94.6 | -78.9 | Vert |
| 26 | 436.426k | 4.8 | +10.1 | +0.9 | +0.0 | 15.8 | 94.8 | -79.0 | Vert |
| 27 | 160.454k | 13.7 | +9.7 | +0.9 | +0.0 | 24.3 | 103.5 | -79.2 | Vert |
| 28 | 246.172k | 9.5 | +9.9 | +0.9 | +0.0 | 20.3 | 99.8 | -79.5 | Vert |
| 29 | 235.719k | 9.5 | +9.9 | +0.9 | +0.0 | 20.3 | 100.2 | -79.9 | Vert |
| 30 | 168.816k | 9.0 | +9.7 | +0.9 | +0.0 | 19.6 | 103.1 | -83.5 | Vert |

CKC Laboratories, Inc. Date: 2/4/2010 Time: 4:47:58 PM SynapSense, Inc. WFO#: 90296
 FCC 15.247(d)/15.209 Test Distance: 3 Meters Sequence#: 14 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d)/15.209**
 Work Order #: **90296**
 Test Type: **Radiated Scan**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-001
 S/N: NA

Date: 2/4/2010
 Time: 4:43:18 PM
 Sequence#: 12
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| EMCO Loop Antenna | 1074 | 04/10/2009 | 04/10/2011 | 00226 |
| 25' 26GHz cable | NA | 05/19/2009 | 05/19/2011 | 01012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-001 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Radiated Magnetic Field
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver. Vertical polarity is the worst case. Integral antenna now connected..
 Hi Ch transmitting. Antenna has a maximum gain of 2.2 dBi.
 Frequencies of interest .009-30 MHz
 55° Fahrenheit
 35% Relative Humidity
 Module is atop a plastic case. Antenna cable is directly connected to the S/A.
 Final BW settings
 RBW = 9 kHz
 VBW = 30kHz

Transducer Legend:

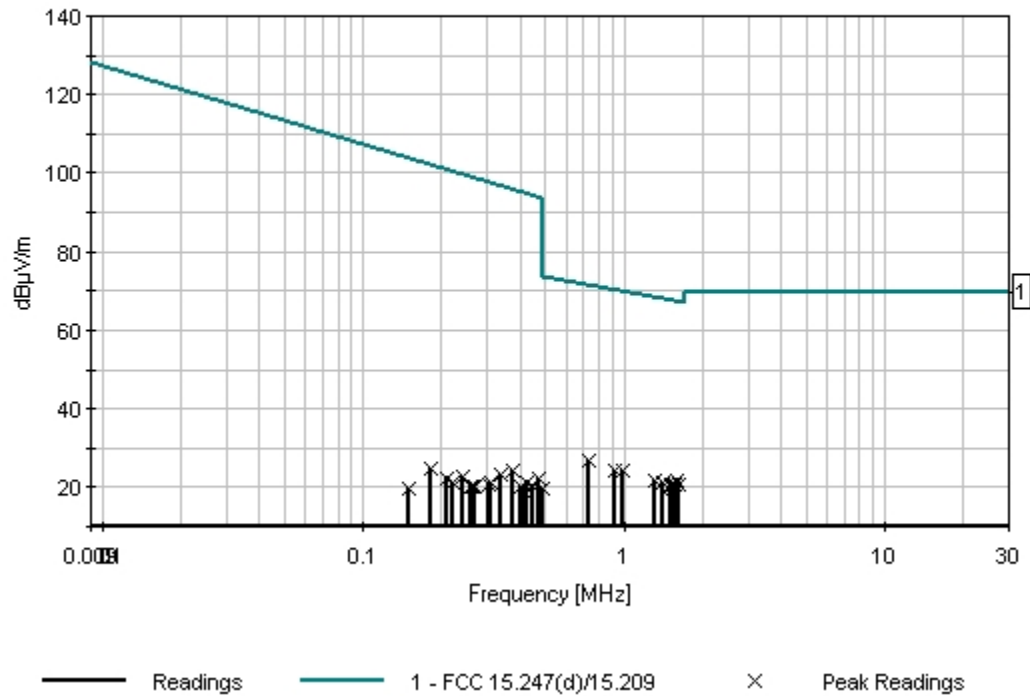
| | |
|--------------------------|-----------------------------------|
| T1=CAB-AN03012-40GHZ-3FT | T2=Mag Loop - AN 00226 - 9kHz-30M |
| T3=CAB-ANP01012-051909 | |

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

| # | Freq MHz | Rdng dBμV | T1 dB | T2 dB | T3 dB | dB | Dist Table | Corr dBμV/m | Spec dBμV/m | Margin dB | Polar Ant |
|---|-------------|--------------|----------|----------|----------|----|---------------|----------------|----------------|--------------|--------------|
| 1 | 729.125k | 15.5 | +0.1 | +10.3 | +0.9 | | +0.0 | 26.8 | 71.6 | -44.8 | Vert |
| 2 | 1.603M | 10.5 | +0.1 | +10.1 | +0.9 | | +0.0 | 21.6 | 67.2 | -45.6 | Vert |
| 3 | 994.644k | 13.0 | +0.1 | +10.2 | +0.9 | | +0.0 | 24.2 | 69.9 | -45.7 | Vert |
| 4 | 923.560k | 12.8 | +0.1 | +10.4 | +0.9 | | +0.0 | 24.2 | 70.3 | -46.1 | Vert |

| | | | | | | | | | | |
|----|----------|------|------|-------|------|------|------|-------|-------|------|
| 5 | 1.626M | 9.6 | +0.1 | +10.1 | +0.9 | +0.0 | 20.7 | 67.2 | -46.5 | Vert |
| 6 | 1.304M | 10.6 | +0.1 | +10.1 | +0.9 | +0.0 | 21.7 | 68.4 | -46.7 | Vert |
| 7 | 1.515M | 9.7 | +0.1 | +10.1 | +0.9 | +0.0 | 20.8 | 67.6 | -46.8 | Vert |
| 8 | 1.559M | 9.5 | +0.1 | +10.1 | +0.9 | +0.0 | 20.6 | 67.4 | -46.8 | Vert |
| 9 | 1.407M | 9.9 | +0.1 | +10.1 | +0.9 | +0.0 | 21.0 | 68.0 | -47.0 | Vert |
| 10 | 1.542M | 9.4 | +0.1 | +10.1 | +0.9 | +0.0 | 20.5 | 67.5 | -47.0 | Vert |
| 11 | 1.501M | 8.9 | +0.1 | +10.1 | +0.9 | +0.0 | 20.0 | 67.6 | -47.6 | Vert |
| 12 | 1.534M | 8.5 | +0.1 | +10.1 | +0.9 | +0.0 | 19.6 | 67.5 | -47.9 | Vert |
| 13 | 373.705k | 13.2 | +0.1 | +10.1 | +0.9 | +0.0 | 24.3 | 96.2 | -71.9 | Vert |
| 14 | 467.787k | 11.2 | +0.1 | +10.1 | +0.9 | +0.0 | 22.3 | 94.2 | -71.9 | Vert |
| 15 | 336.073k | 12.4 | +0.1 | +10.0 | +0.9 | +0.0 | 23.4 | 97.1 | -73.7 | Vert |
| 16 | 425.973k | 10.1 | +0.1 | +10.1 | +0.9 | +0.0 | 21.2 | 95.0 | -73.8 | Vert |
| 17 | 486.603k | 8.8 | +0.1 | +10.1 | +0.9 | +0.0 | 19.9 | 93.9 | -74.0 | Vert |
| 18 | 451.061k | 8.9 | +0.1 | +10.1 | +0.9 | +0.0 | 20.0 | 94.5 | -74.5 | Vert |
| 19 | 400.884k | 9.3 | +0.1 | +10.1 | +0.9 | +0.0 | 20.4 | 95.5 | -75.1 | Vert |
| 20 | 413.429k | 7.7 | +0.1 | +10.1 | +0.9 | +0.0 | 18.8 | 95.3 | -76.5 | Vert |
| 21 | 308.893k | 10.0 | +0.1 | +10.0 | +0.9 | +0.0 | 21.0 | 97.8 | -76.8 | Vert |
| 22 | 241.991k | 11.7 | +0.1 | +9.9 | +0.9 | +0.0 | 22.6 | 99.9 | -77.3 | Vert |
| 23 | 300.531k | 9.6 | +0.1 | +10.0 | +0.9 | +0.0 | 20.6 | 98.0 | -77.4 | Vert |
| 24 | 181.361k | 14.1 | +0.1 | +9.8 | +0.9 | +0.0 | 24.9 | 102.4 | -77.5 | Vert |
| 25 | 269.170k | 9.3 | +0.1 | +9.9 | +0.9 | +0.0 | 20.2 | 99.0 | -78.8 | Vert |
| 26 | 264.989k | 9.2 | +0.1 | +9.9 | +0.9 | +0.0 | 20.1 | 99.1 | -79.0 | Vert |
| 27 | 210.630k | 11.2 | +0.1 | +9.8 | +0.9 | +0.0 | 22.0 | 101.1 | -79.1 | Vert |
| 28 | 256.626k | 9.3 | +0.1 | +9.9 | +0.9 | +0.0 | 20.2 | 99.4 | -79.2 | Vert |
| 29 | 218.993k | 10.6 | +0.1 | +9.8 | +0.9 | +0.0 | 21.4 | 100.8 | -79.4 | Vert |
| 30 | 150.000k | 9.1 | +0.1 | +9.7 | +0.9 | +0.0 | 19.8 | 104.1 | -84.3 | Vert |

CKC Laboratories, Inc. Date: 2/4/2010 Time: 4:43:18 PM SynapSense, Inc. W/O#: 90296
 FCC 15.247(d)/15.209 Test Distance: 3 Meters Sequence#: 12 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **FCC 15.247(d) / 15.209**
 Work Order #: **90296**
 Test Type: **Maximized Emissions**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: Synapsense Corporation
 Model: 11-0606-001
 S/N: NA

Date: 2/5/2010
 Time: 12:14:18
 Sequence#: 15
 Tested By: Chuck Kendall

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-----------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| Bilog Antenna | 2455 | 09/10/2009 | 09/10/2011 | AN01992 |
| HP-8447D Preamp | 2727A05444 | 06/20/2008 | 06/20/2010 | AN00062 |
| Ans Cable | NA | 01/26/2010 | 01/26/2012 | AN03013 |
| Andrew-25' | NA | 05/19/2009 | 05/19/2011 | AN01012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-001 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.205/209 Spurious emissions
 Tested with receiver activated to meet FCC 15.109 requirements
 New batteries installed in +5dBm transceiver.
 Frequencies of interest 30 -1000 MHz
 70 ° Fahrenheit
 35% Relative Humidity
 Tx is transmitting on frequencies: 2405 MHz, 2445 MHz, & 2480 MHz
 Module is in vertical position, atop foam, 80 cm from ground plane with the integral antenna.
 Test Distance is 3m.
 RBW=120kHz
 VBW=360kHz

Transducer Legend:

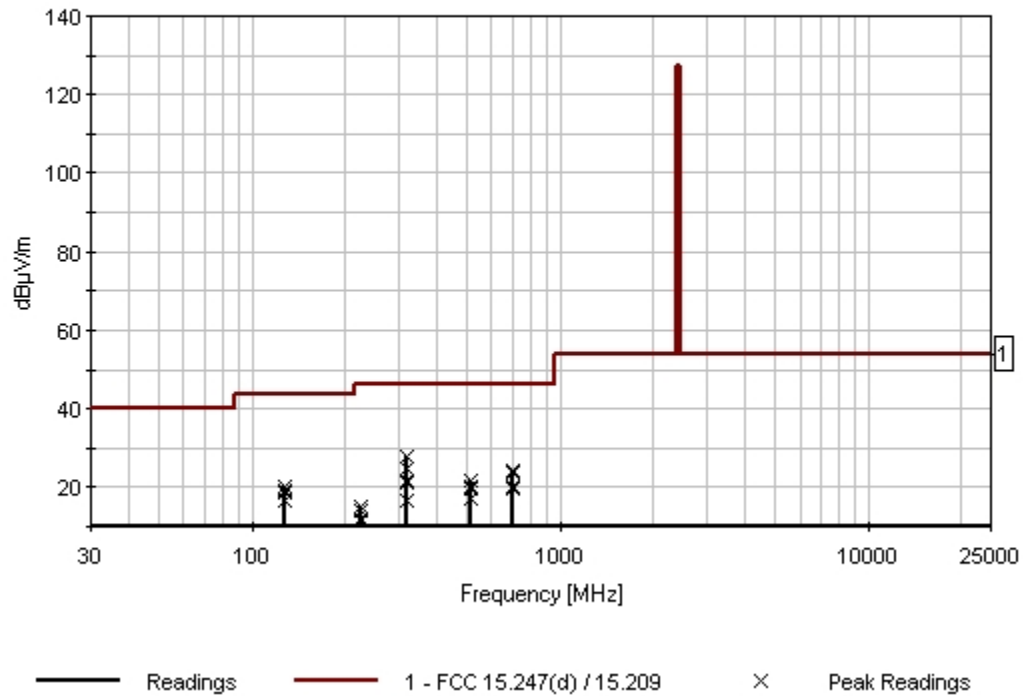
| | |
|------------------------|----------------------------------|
| T1=AMP-AN00062-062008 | T2=ANT-AN01992-100909 25-1000MHz |
| T3=CAB-ANP01012-051909 | T4=CAB-AN03013-40GHZ-3FT |

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 | 320.012M | 41.4 | -29.7 | +14.3 | +1.3 | +0.3 | +0.0 | 27.6 | 46.0 Mid Ch | -18.4 | Horiz |
| 2 | 320.044M | 38.5 | -29.7 | +14.3 | +1.3 | +0.3 | +0.0 | 24.7 | 46.0 Lo Ch | -21.3 | Horiz |
| 3 | 704.078M | 31.1 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 24.1 | 46.0 Hi Freq | -21.9 | Vert |

| | | | | | | | | | | | |
|----|----------|------|-------|-------|------|------|------|------|-----------------|-------|-------|
| 4 | 703.971M | 30.8 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 23.8 | 46.0 Mid Ch | -22.2 | Vert |
| 5 | 704.044M | 30.6 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 23.6 | 46.0 Mid Ch | -22.4 | Horiz |
| 6 | 127.927M | 38.1 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 20.4 | 43.5 Hi Freq | -23.1 | Vert |
| 7 | 320.024M | 35.6 | -29.7 | +14.3 | +1.3 | +0.3 | +0.0 | 21.8 | 46.0 Mid Ch | -24.2 | Vert |
| 8 | 128.044M | 36.9 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 19.2 | 43.5 Lo Ch | -24.3 | Vert |
| 9 | 511.942M | 31.6 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 21.6 | 46.0 Hi Freq | -24.4 | Vert |
| 10 | 127.944M | 36.6 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 18.9 | 43.5 Mid Ch | -24.6 | Horiz |
| 11 | 128.045M | 36.3 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 18.6 | 43.5 Lo Ch | -24.9 | Horiz |
| 12 | 319.996M | 34.8 | -29.7 | +14.3 | +1.3 | +0.3 | +0.0 | 21.0 | 46.0 Hi Freq | -25.0 | Vert |
| 13 | 512.014M | 30.3 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 20.3 | 46.0 Mid Ch | -25.7 | Vert |
| 14 | 704.044M | 27.1 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 20.1 | 46.0 Lo Ch | -25.9 | Vert |
| 15 | 512.045M | 29.8 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 19.8 | 46.0 Lo Ch | -26.2 | Horiz |
| 16 | 511.944M | 29.7 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 19.7 | 46.0 Mid Ch | -26.3 | Horiz |
| 17 | 704.045M | 26.5 | -30.3 | +21.4 | +1.5 | +0.4 | +0.0 | 19.5 | 46.0 Lo Ch | -26.5 | Horiz |
| 18 | 127.843M | 34.2 | -30.5 | +11.5 | +1.1 | +0.2 | +0.0 | 16.5 | 43.5 Mid Ch | -27.0 | Vert |
| 19 | 512.044M | 27.2 | -30.5 | +18.8 | +1.4 | +0.3 | +0.0 | 17.2 | 46.0 Lo Ch | -28.8 | Vert |
| 20 | 320.043M | 30.4 | -29.7 | +14.3 | +1.3 | +0.3 | +0.0 | 16.6 | 46.0 Lo Ch | -29.4 | Vert |
| 21 | 224.041M | 32.5 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 14.9 | 46.0 Mid Ch | -31.1 | Vert |
| 22 | 224.044M | 31.8 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 14.2 | 46.0 Hi Freq | -31.8 | Vert |
| 23 | 224.001M | 31.8 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 14.2 | 46.0 Lo Ch | -31.8 | Horiz |
| 24 | 223.943M | 29.6 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 12.0 | 46.0 Mid Ch | -34.0 | Horiz |
| 25 | 224.043M | 28.9 | -29.8 | +10.8 | +1.2 | +0.2 | +0.0 | 11.3 | 46.0 Lo Ch | -34.7 | Vert |

CKC Laboratories, Inc. Date: 2/5/2010 Time: 12:14:18 SynapSense, Inc. WVO#: 90296
 FCC 15.247(d) / 15.209 Test Distance: 3 Meters Sequence#: 15 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240
 Customer: **Synapsense Corporation**
 Specification: **FCC 15.209**
 Work Order #: **90296** Date: 2/5/2010
 Test Type: **Maximized Emissions** Time: 13:53:49
 Equipment: **SynapStamp Radio Module** Sequence#: 17
 Manufacturer: Synapsense Corporation Tested By: Chuck Kendall
 Model: 11-0606-001
 S/N: NA

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|-----------------------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |
| Andrew-25' | NA | 05/19/2009 | 05/19/2011 | AN01012 |
| Horn Antenna | 3413 | 06/06/2008 | 06/06/2010 | AN00327 |
| HP Preamp 83017A | 000009031 | 07/17/2009 | 07/17/2011 | 3155 |
| Ans Cable | NA | 01/26/2010 | 01/26/2012 | AN03012 |
| Horn Antenna 18-26GHz | 01005 | 11/13/2008 | 11/13/2010 | AN02046 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-001 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

| |
|---|
| 15.247(d)/15.205/209 Spurious emissions Tested with receiver activated to meet FCC 15.109 requirements New batteries installed in +5dBm transceiver. Frequencies of interest 1-25 GHz 58 ° Fahrenheit 35% Relative Humidity Tx is transmitting on frequencies: 2405 MHz, 2445 MHz, & 2480 MHz Module is in the vertical position atop foam, 80 cm from ground plane with the internal antenna. Final BWs: RBW=1MHz VBW=3MHz |
|---|

Transducer Legend:

| | |
|---------------------------|---------------------------|
| T1=CAB-ANP01012-051909 | T2=Amp AN03155 to 26.5GHz |
| T3=ANT AN00327 1GHz-18GHz | T4=CAB-AN03012-40GHz-3FT |

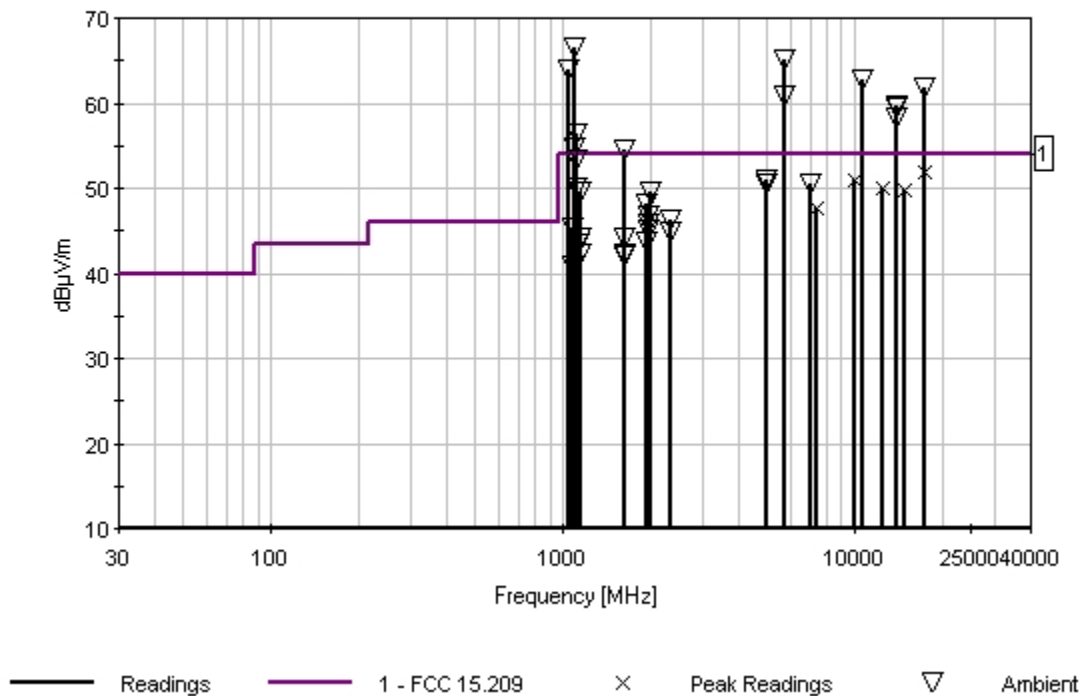
Measurement Data: Reading listed by margin. Test Distance: 3 Meters

| # | 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 | 1089.600M Ambient | 76.5 | +1.6 | -36.0 | +24.0 | +0.4 | +0.0 | 66.5 | 54.0 | +12.5 | Horiz |
| 2 | 5748.000M Ambient | 60.3 | +3.3 | -33.4 | +34.0 | +0.9 | +0.0 | 65.1 | 54.0 | +11.1 | Horiz |
| 3 | 1046.200M Ambient | 74.2 | +1.6 | -36.3 | +23.9 | +0.4 | +0.0 | 63.8 | 54.0 | +9.8 | Horiz |

| | | | | | | | | | | | |
|-----------|---------------------------|------|------|-------|-------|------|------|------|------|------|-------|
| 4 | 10544.000 M Ambient | 52.5 | +4.6 | -33.6 | +38.2 | +1.1 | +0.0 | 62.8 | 54.0 | +8.8 | Horiz |
| 5 | 17389.000 M Ambient | 44.7 | +6.3 | -33.2 | +42.5 | +1.5 | +0.0 | 61.8 | 54.0 | +7.8 | Horiz |
| 6 | 5771.000M Ambient | 55.9 | +3.4 | -33.4 | +34.0 | +0.9 | +0.0 | 60.8 | 54.0 | +6.8 | Vert |
| 7 | 13922.000 M Ambient | 46.2 | +5.1 | -33.4 | +40.4 | +1.4 | +0.0 | 59.7 | 54.0 | +5.7 | Vert |
| 8 | 13809.000 M Ambient | 45.8 | +5.3 | -33.3 | +40.3 | +1.4 | +0.0 | 59.5 | 54.0 | +5.5 | Horiz |
| 9 | 13944.000 M Ambient | 44.8 | +5.1 | -33.4 | +40.4 | +1.4 | +0.0 | 58.3 | 54.0 | +4.3 | Vert |
| 10 | 1105.000M Ambient | 66.0 | +1.6 | -35.9 | +24.1 | +0.4 | +0.0 | 56.2 | 54.0 | +2.2 | Vert |
| 11 | 1089.600M Ambient | 64.7 | +1.6 | -36.0 | +24.0 | +0.4 | +0.0 | 54.7 | 54.0 | +0.7 | Vert |
| 12 | 1625.800M Ambient | 60.9 | +1.9 | -34.5 | +25.6 | +0.5 | +0.0 | 54.4 | 54.0 | +0.4 | Vert |
| 13 | 1119.000M Ambient | 63.0 | +1.6 | -35.8 | +24.1 | +0.4 | +0.0 | 53.3 | 54.0 | -0.7 | Vert |
| 14 | 17360.000 M | 35.2 | +6.3 | -33.3 | +42.3 | +1.5 | +0.0 | 52.0 | 54.0 | -2.0 | Vert |
| 7th Hi Ch | | | | | | | | | | | |
| 15 | 9920.000M | 40.5 | +4.5 | -33.3 | +38.2 | +1.1 | +0.0 | 51.0 | 54.0 | -3.0 | Vert |
| 4th Hi Ch | | | | | | | | | | | |
| 16 | 4960.000M Ambient | 46.9 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 50.9 | 54.0 | -3.1 | Vert |
| 17 | 4960.000M Ambient | 46.6 | +2.7 | -33.0 | +33.5 | +0.8 | +0.0 | 50.6 | 54.0 | -3.4 | Vert |
| 18 | 7054.000M Ambient | 43.2 | +4.5 | -33.5 | +35.3 | +1.0 | +0.0 | 50.5 | 54.0 | -3.5 | Horiz |
| 19 | 7077.000M Ambient | 43.1 | +4.4 | -33.5 | +35.4 | +1.0 | +0.0 | 50.4 | 54.0 | -3.6 | Vert |
| 20 | 1110.600M Ambient | 59.9 | +1.6 | -35.9 | +24.1 | +0.4 | +0.0 | 50.1 | 54.0 | -3.9 | Horiz |
| 21 | 12400.000 M | 37.8 | +5.7 | -33.7 | +38.9 | +1.3 | +0.0 | 50.0 | 54.0 | -4.0 | Vert |
| 5th Hi Ch | | | | | | | | | | | |
| 22 | 14880.000 M | 35.2 | +5.9 | -33.5 | +40.8 | +1.4 | +0.0 | 49.8 | 54.0 | -4.2 | Vert |
| 6th Hi Ch | | | | | | | | | | | |
| 23 | 1149.800M Ambient | 59.0 | +1.7 | -35.7 | +24.2 | +0.4 | +0.0 | 49.6 | 54.0 | -4.4 | Horiz |
| 24 | 1985.600M Ambient | 53.6 | +2.1 | -34.0 | +27.4 | +0.5 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| 25 | 1931.000M Ambient | 52.4 | +2.0 | -34.1 | +27.2 | +0.5 | +0.0 | 48.0 | 54.0 | -6.0 | Vert |

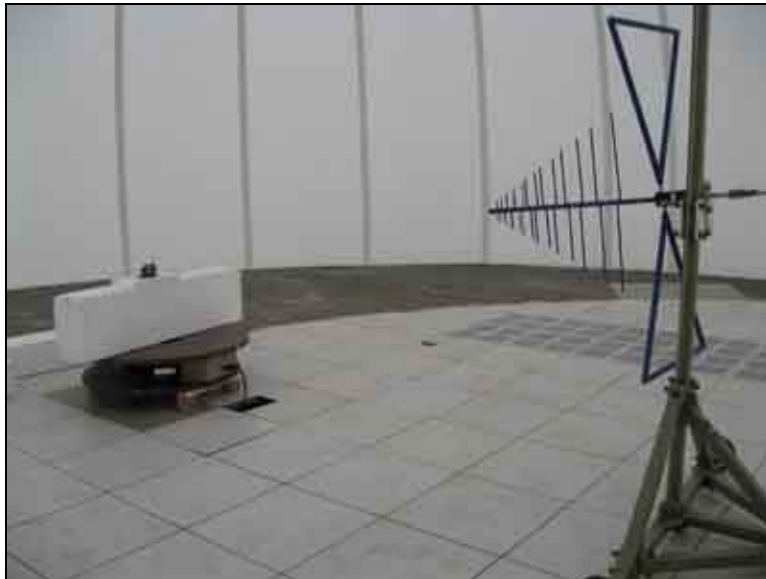
| | | | | | | | | | | | |
|----|----------------------|------|------|-------|-------|------|------|------|-------------------|-------|-------|
| 26 | 7440.000M | 40.6 | +3.6 | -33.6 | +36.1 | +1.0 | +0.0 | 47.7 | 54.0 3rd Hi Ch | -6.3 | Vert |
| 27 | 1973.000M Ambient | 50.6 | +2.1 | -34.0 | +27.4 | +0.5 | +0.0 | 46.6 | 54.0 | -7.4 | Vert |
| 28 | 2335.600M Ambient | 49.2 | +2.1 | -33.8 | +28.2 | +0.6 | +0.0 | 46.3 | 54.0 | -7.7 | Horiz |
| 29 | 1952.000M Ambient | 49.8 | +2.1 | -34.0 | +27.3 | +0.5 | +0.0 | 45.7 | 54.0 | -8.3 | Vert |
| 30 | 1074.200M Ambient | 55.4 | +1.6 | -36.1 | +24.0 | +0.4 | +0.0 | 45.3 | 54.0 | -8.7 | Horiz |
| 31 | 1971.600M Ambient | 49.0 | +2.1 | -34.0 | +27.4 | +0.5 | +0.0 | 45.0 | 54.0 | -9.0 | Horiz |
| 32 | 2323.000M Ambient | 47.7 | +2.1 | -33.8 | +28.2 | +0.6 | +0.0 | 44.8 | 54.0 | -9.2 | Vert |
| 33 | 1616.000M Ambient | 50.6 | +1.9 | -34.5 | +25.6 | +0.5 | +0.0 | 44.1 | 54.0 | -9.9 | Vert |
| 34 | 1141.400M Ambient | 53.5 | +1.6 | -35.7 | +24.2 | +0.4 | +0.0 | 44.0 | 54.0 | -10.0 | Vert |
| 35 | 1932.400M Ambient | 48.1 | +2.0 | -34.1 | +27.2 | +0.5 | +0.0 | 43.7 | 54.0 | -10.3 | Horiz |
| 36 | 1124.600M Ambient | 53.1 | +1.6 | -35.8 | +24.1 | +0.4 | +0.0 | 43.4 | 54.0 | -10.6 | Vert |
| 37 | 1617.400M Ambient | 48.7 | +1.9 | -34.5 | +25.6 | +0.5 | +0.0 | 42.2 | 54.0 | -11.8 | Horiz |
| 38 | 1142.800M Ambient | 51.6 | +1.6 | -35.7 | +24.2 | +0.4 | +0.0 | 42.1 | 54.0 | -11.9 | Horiz |
| 39 | 1625.800M Ambient | 48.5 | +1.9 | -34.5 | +25.6 | +0.5 | +0.0 | 42.0 | 54.0 | -12.0 | Horiz |
| 40 | 1079.800M Ambient | 50.8 | +1.6 | -36.0 | +24.0 | +0.4 | +0.0 | 40.8 | 54.0 | -13.2 | Horiz |

CKC Laboratories, Inc. Date: 2/5/2010 Time: 13:53:49 SynapSense, Inc. WO#: 90296
 FCC 15.209 Test Distance: 3 Meters Sequence#: 17 Ext ATTN: 0 dB



Note: Since the time of testing, it has come to CKC Laboratories attention; the above company name should read Synapsense Corporation, and not SynapSense, Inc. The above plot screen capture was taken at the time of testing and cannot be changed.

Test Setup Photos





15.247(d) Band Edge

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **SynapSense, Inc.**

Specification: **FCC 15.247(d) / 15.209**

Work Order #: **90296**

Date: 4/16/2010

Test Type: **Maximized Emissions**

Time: 12:19:07

Equipment: **SynapStamp Radio Module**

Sequence#: 14

Manufacturer: SynapSense, Inc.

Tested By: Chuck Kendall

Model: 11-0606-001

S/N: N/A

Test Equipment:

| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
|----|----------|-------------------|---------------------|------------------|--------------|
| | AN02660 | Spectrum Analyzer | E4446A | 8/7/2008 | 8/7/2010 |
| T1 | ANP01012 | Cable | PNMNM | 5/19/2009 | 5/19/2011 |
| T2 | AN03012 | Cable | 32022-2-29094K-36TC | 1/26/2010 | 1/26/2012 |
| T3 | AN03155 | Preamp | 83017A | 7/17/2009 | 7/17/2011 |
| T4 | AN00327 | Horn Antenna | 3115 | 6/6/2008 | 6/6/2010 |
| T5 | ANP01403 | Cable | 58758-23 | 6/10/2009 | 6/10/2011 |
| T6 | ANdBm | Unit Conversion | | 4/12/2010 | 4/12/2012 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------|-------------|-----|
| SynapStamp Radio Module* | SynapSense, Inc. | 11-0606-001 | N/A |
| SynapStamp Radio Module | SynapSense, Inc. | 11-0606-011 | N/A |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Bandedge
 New batteries installed in +5dBm transceiver.
 58°F
 35% relative humidity
 Tx is transmitting on frequencies: 2405 MHz & 2480 MHz

 Duty Cycle Correction Factor = 20 Log (0.247ms/100ms) or -32dB

 Module is atop foam, 80 cm from ground plane with the external antenna,
 RBW=1 MHz
 VBW=1MHz

Ext Attn: 0 dB

| Measurement Data: | | Reading listed by order taken. | | | | | Test Distance: 3 Meters | | | | |
|--------------------------|-----------|--------------------------------|--------------|---------------|-------|-------|-------------------------|--------|--------|--------|-------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | MHz | dBμV | T5 dB | T6 dB | dB | dB | Table | dBμV/m | dBμV/m | dB | Ant |
| 1 | 2480.484M | 94.7 | +2.2 +2.5 | +0.6 +0.0 | -33.7 | +28.5 | +0.0 | 94.8 | 127.0 | -32.2 | Vert |
| 2 | 2479.548M | 94.4 | +2.2 +2.5 | +0.6 -32.0 | -33.7 | +28.5 | +0.0 | 62.5 | 127.0 | -64.5 | Vert |
| 3 | 2404.475M | 92.4 | +2.2 +2.4 | +0.6 +0.0 | -33.8 | +28.3 | +0.0 | 92.1 | 127.0 | -34.9 | Vert |
| 4 | 2402.500M | 71.3 | +2.2 +2.4 | +0.6 +0.0 | -33.8 | +28.3 | +0.0 | 71.0 | 127.0 | -56.0 | Vert |
| 5 | 2404.500M | 92.4 | +2.2 +2.4 | +0.6 -32.0 | -33.8 | +28.3 | +0.0 | 60.1 | 127.0 | -66.9 | Vert |

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **SynapSense, Inc.**
 Specification: **FCC 15.247(d) / 15.209**
 Work Order #: **90296**
 Test Type: **Maximized Emissions**
 Equipment: **SynapStamp Radio Module**
 Manufacturer: SynapSense, Inc.
 Model: 11-0606-011
 S/N: N/A

Date: 4/23/2010
 Time: 15:48:48
 Sequence#: 15
 Tested By: Chuck Kendall

Test Equipment:

| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
|----|----------|-------------------|----------------------|------------------|--------------|
| | AN02660 | Spectrum Analyzer | E4446A | 8/7/2008 | 8/7/2010 |
| | ANP01012 | Cable | PNMNM | 5/19/2009 | 5/19/2011 |
| T1 | AN03012 | Cable | 32022-2-29094K-36TC | 1/26/2010 | 1/26/2012 |
| T2 | AN03155 | Preamp | 83017A | 7/17/2009 | 7/17/2011 |
| T3 | AN00327 | Horn Antenna | 3115 | 6/6/2008 | 6/6/2010 |
| | ANP01403 | Cable | 58758-23 | 6/10/2009 | 6/10/2011 |
| T4 | ANdBm | Unit Conversion | | 4/12/2010 | 4/12/2012 |
| T5 | ANP05904 | Cable | 32022-2-29094K-144TC | 6/9/2009 | 6/9/2011 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------|-------------|-----|
| SynapStamp Radio Module | SynapSense, Inc. | 11-0606-001 | N/A |
| SynapStamp Radio Module* | SynapSense, Inc. | 11-0606-011 | N/A |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

Test Conditions / Notes:

15.247(d) Bandedge
 New batteries installed in +5dBm transceiver.
 72°F
 30% relative humidity
 Tx is transmitting on frequencies: 2405 MHz & 2480 MHz

 Duty Cycle Correction Factor = 20 Log (0.247ms/100ms) or -32dB

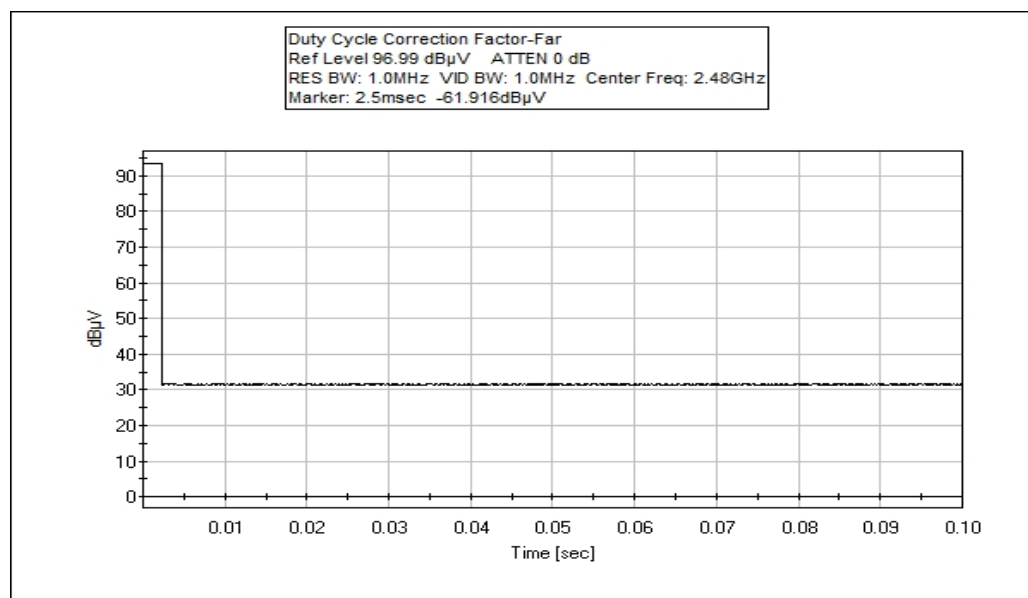
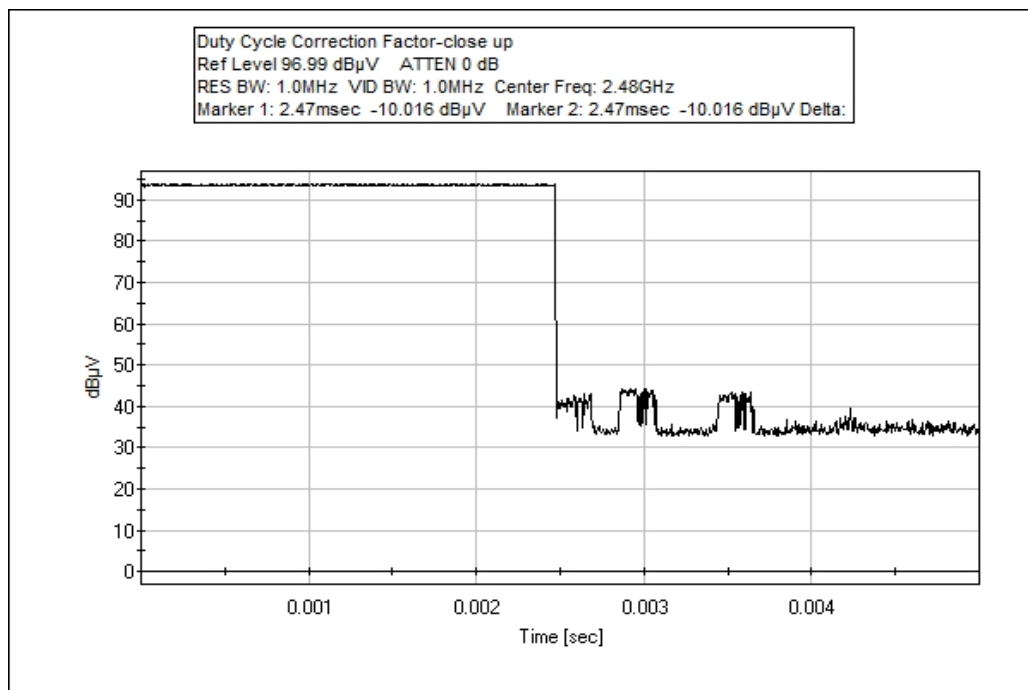
 Module is atop foam, 80 cm from ground plane with the internal antenna,
 RBW=1 MHz
 VBW=1 MHz

Ext Attn: 0 dB

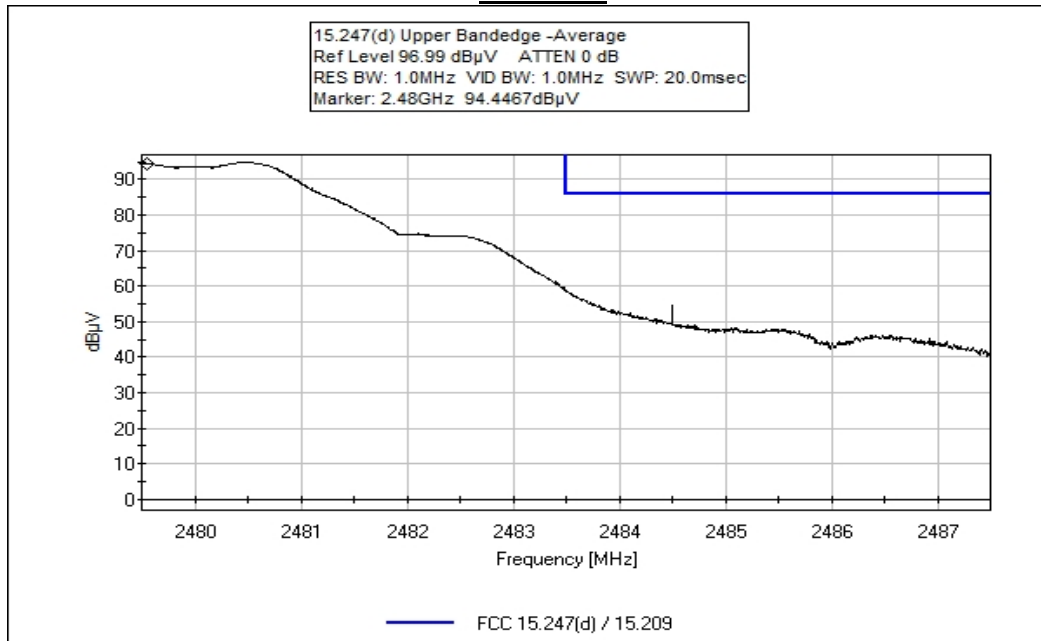
Measurement Data: Reading listed by order taken. Test Distance: 3 Meters

| # | Freq | Rdng | T1 T5 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
|---|-----------|------------|--------------|-------|-------|-------|-------|--------------|--------------|--------|-------|
| | MHz | dB μ V | dB | dB | dB | dB | Table | dB μ V/m | dB μ V/m | dB | Ant |
| 1 | 2479.460M | 67.7 | +0.6 +2.3 | -33.7 | +28.5 | +0.0 | +0.0 | 65.4 | 127.0 | -61.6 | Vert |
| 2 | 2479.460M | 67.7 | +0.6 +2.3 | -33.7 | +28.5 | -32.0 | +0.0 | 33.4 | 127.0 | -93.6 | Vert |
| 3 | 2404.425M | 68.8 | +0.6 +2.2 | -33.8 | +28.3 | -32.0 | +0.0 | 34.1 | 127.0 | -92.9 | Vert |
| 4 | 2404.425M | 68.8 | +0.6 +2.2 | -33.8 | +28.3 | +0.0 | +0.0 | 66.1 | 127.0 | -60.9 | Vert |

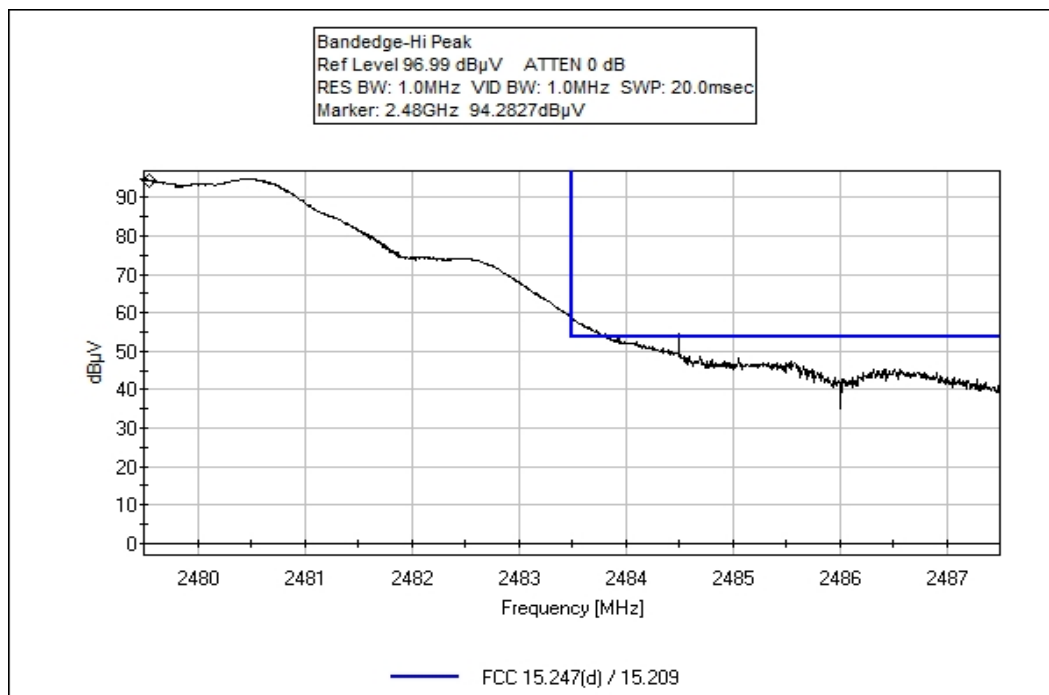
Duty Cycle Correction Factor – Close-up & Far



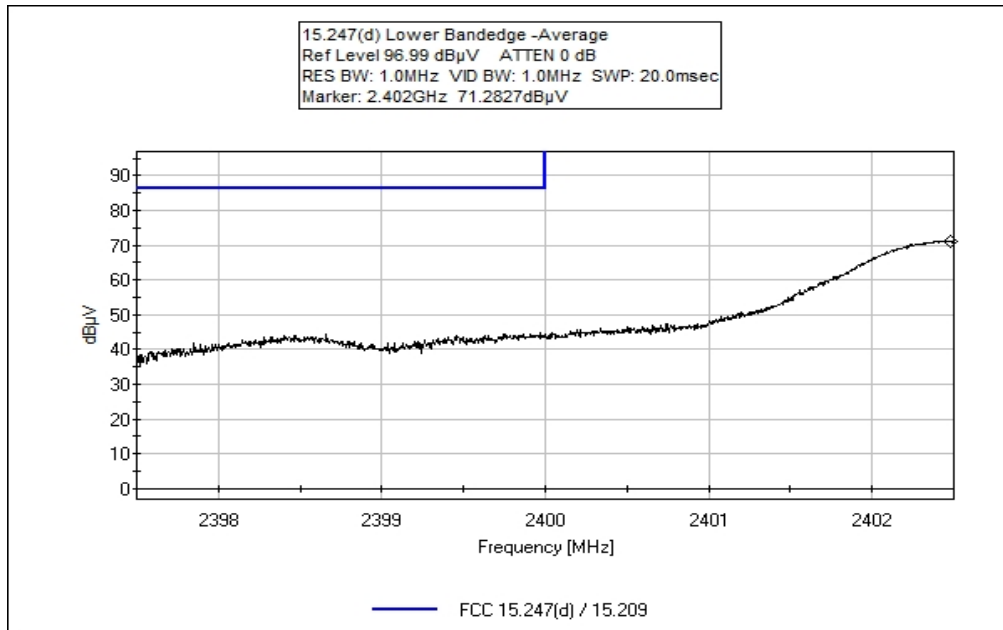
Test Plots



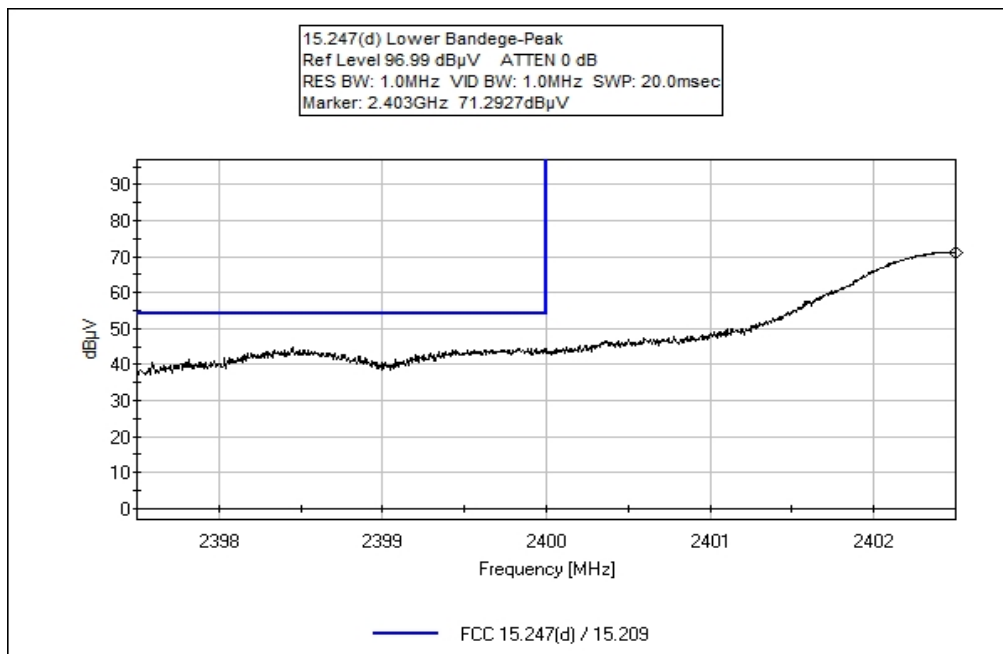
15.247(d) Band Edge-V-Upper Channel-Ext Ant (Radiated Emissions-Average Measurement)



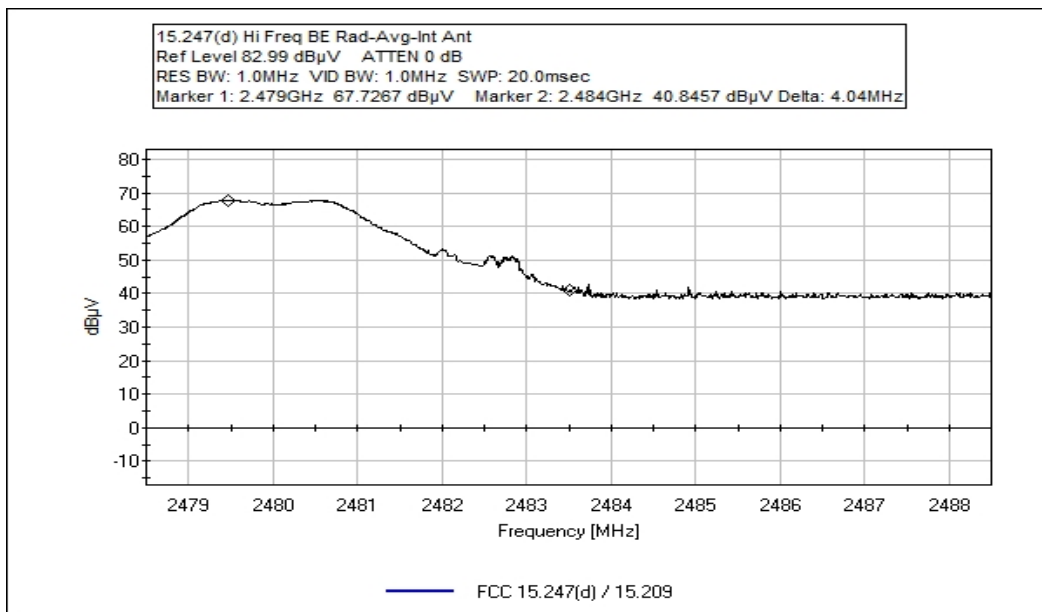
15.247(d) Band Edge-V-Upper Channel-Ext Ant (Radiated Emissions-Peak Measurement)



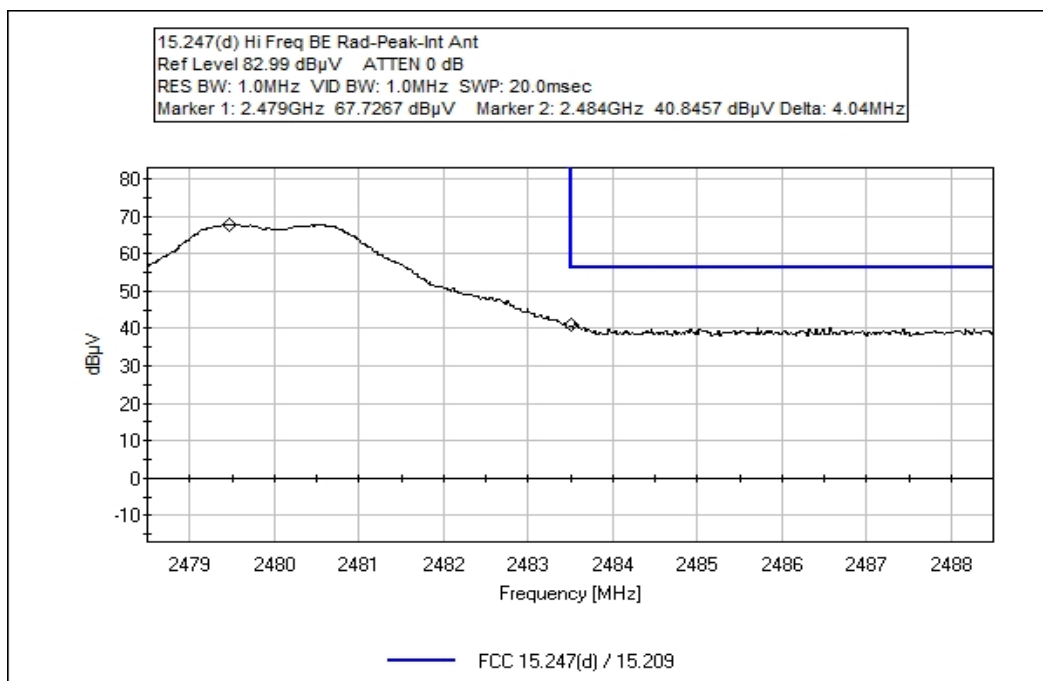
15.247(d) Band Edge-V-Lower Channel-Ext Ant (Radiated Emissions-Average Measurement)



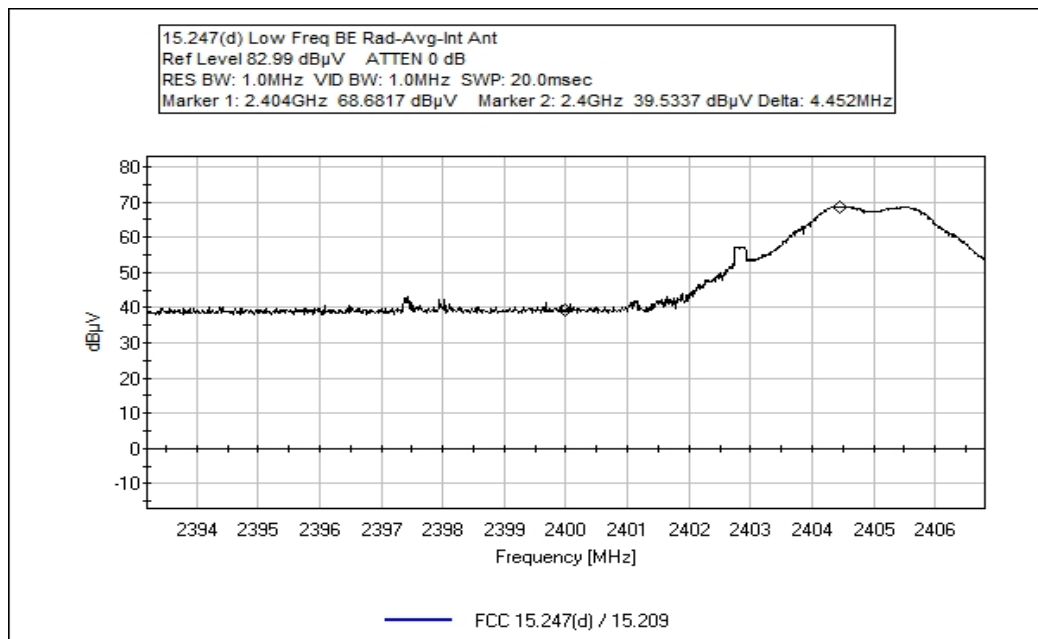
15.247(d) Band Edge-V-Lower Channel-Ext Ant (Radiated Emissions-Peak Measurement)



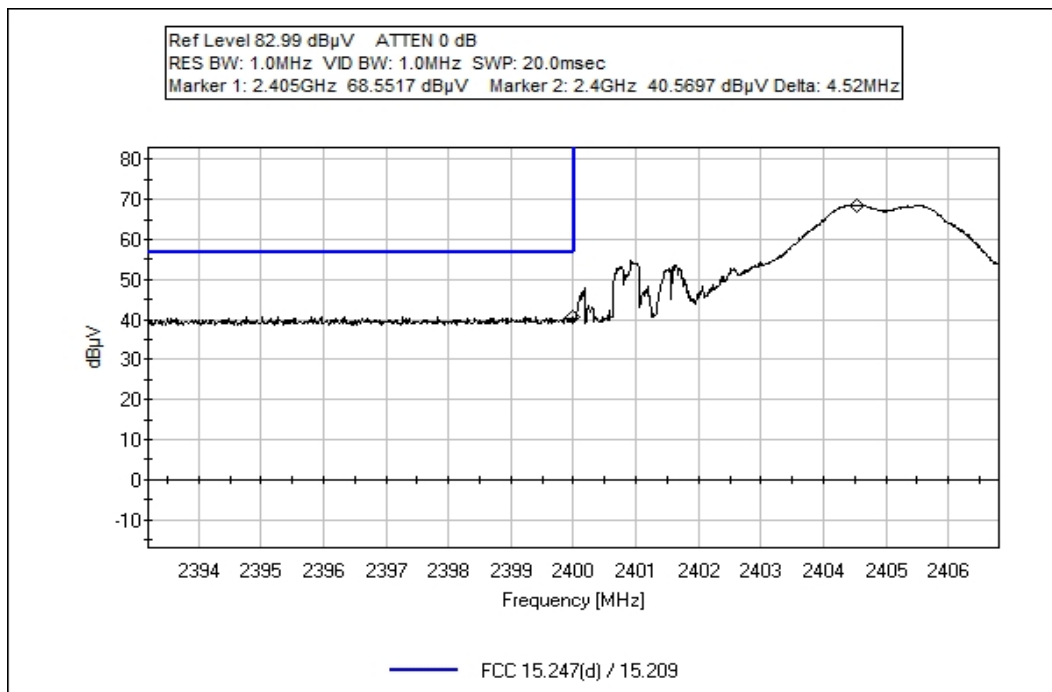
15.247(d) Band Edge-V-Upper Channel-Int Ant (Radiated Emissions-Average Measurement)



15.247(d) Band Edge-V-Upper Channel-Int Ant (Radiated Emissions-Peak Measurement)



15.247(d) Band Edge-V-Lower Channel-Int Ant (Radiated Emissions-Average Measurement)



15.247(d) Band Edge-V-Lower Channel-Int Ant (Radiated Emissions-Peak Measurement)

Test Setup Photos



15.247(e) Peak Power Spectral Density

| Test Equipment | | | | |
|----------------|------------|------------|------------|-------|
| Equipment | Serial | Cal Date | Cal Due | Asset |
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**
 Specification: **15.247(d) Peak Power Spectral Density**
 Work Order #: **90296** Date: 2/3/2010
 Test Type: **Radiated Scan** Time: 12:15:57
 Equipment: **SynapStamp Radio Module** Sequence#: 5
 Manufacturer: Synapsense Corporation Tested By: Chuck Kendall
 Model: 11-0606-011
 S/N: NA

Test Equipment:

| Function | S/N | Calibration Date | Cal Due Date | Asset # |
|----------|------------|------------------|--------------|---------|
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|----------|--------------|---------|-----|
|----------|--------------|---------|-----|

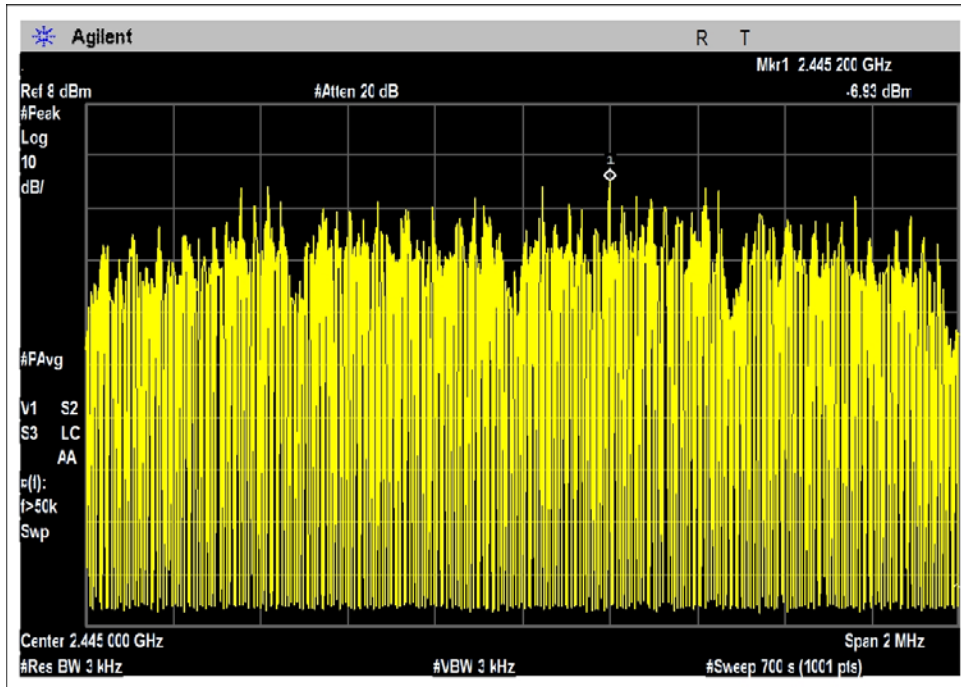
Test Conditions / Notes:

15.247(d) Peak Power Spectral Density Conducted
 New batteries installed in +5dBm transceiver.
 Frequencies of interest 2405-2480 MHz
 70° Fahrenheit
 35% Relative Humidity
 Module is atop a plastic case. Antenna cable is directly connected to the S/A.
 RBW = 3kHz
 VBW = 3kHz
 Span = 2MHz
 Sweep time = 2MHz/3kHz or 667seconds (rounded it off to 700 seconds for these measurement)

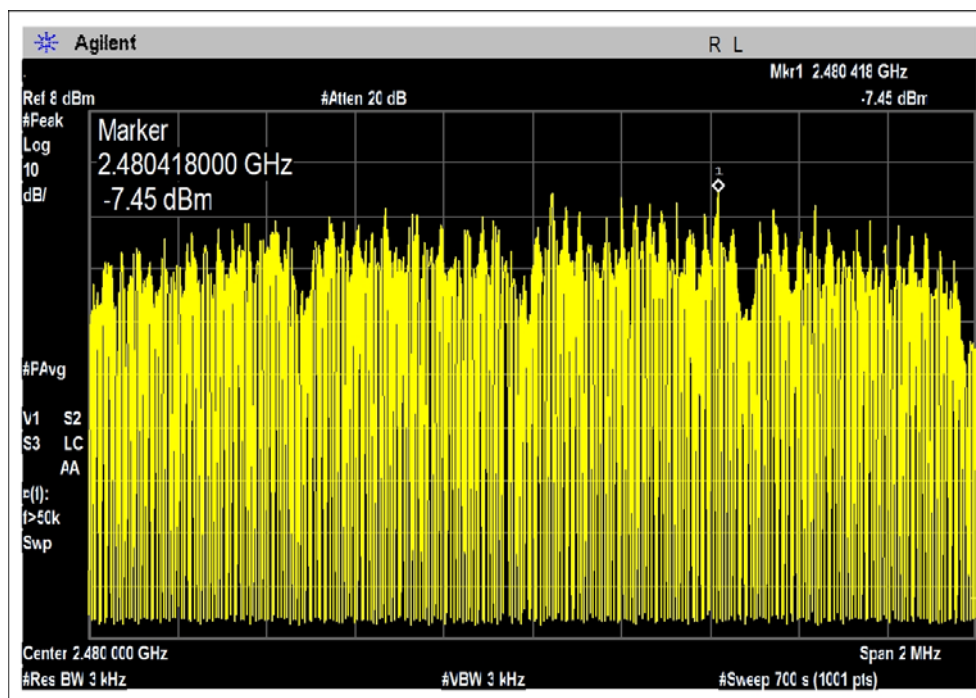
Test Plots



15.247(d) Peak Power Spectral Density-Low Channel



15.247(d) Peak Power Spectral Density-Mid Channel



15.247(d) Peak Power Spectral Density-High Channel

Test Setup Photos



RSS-210 99% Bandwidth

| Test Equipment | | | | |
|----------------|------------|------------|------------|-------|
| Equipment | Serial | Cal Date | Cal Due | Asset |
| E4446A | US44300407 | 08/07/2008 | 08/07/2010 | 02660 |

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: **Synapsense Corporation**

Specification: **99% Bandwidth**

Work Order #: **90296**

Date: 2/3/2010

Test Type: **Radiated Scan**

Time: 15:46:52

Equipment: **SynapStamp Radio Module**

Manufacturer: Synapsense Corporation

Tested By: Chuck Kendall

Model: 11-0606-011

S/N: NA

Equipment Under Test (= EUT):*

| Function | Manufacturer | Model # | S/N |
|--------------------------|------------------------|-------------|-----|
| SynapStamp Radio Module* | Synapsense Corporation | 11-0606-011 | NA |

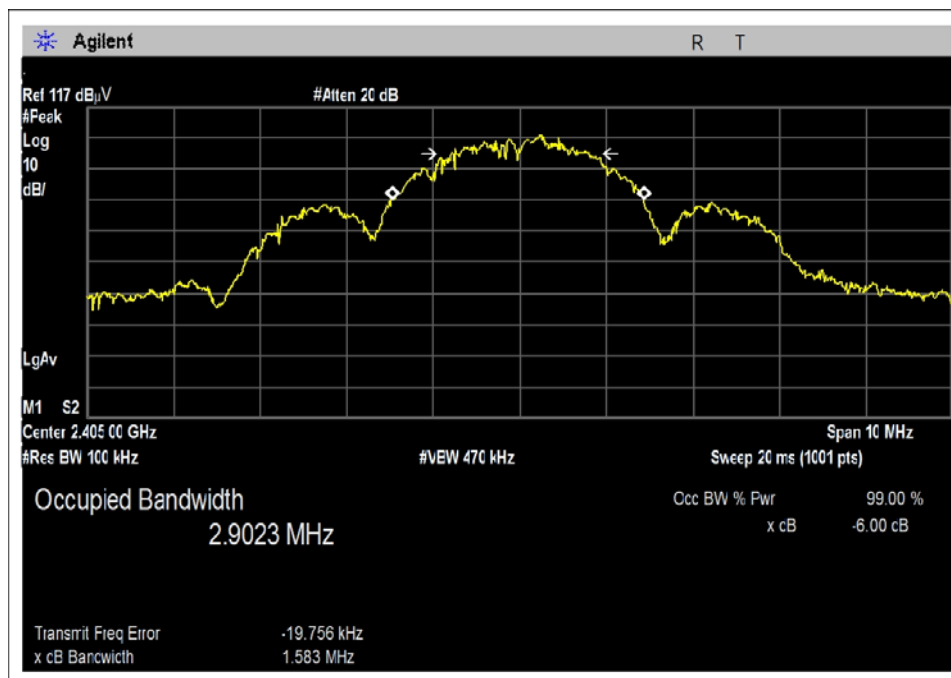
Test Conditions / Notes:

99% Bandwidth
 New batteries installed in +5dBm transceiver.
 Frequencies of interest 2405-2480 MHz
 70 °Fahrenheit
 35% Relative Humidity
 Module is atop a plastic case. Antenna cable is directly connected to the S/A.

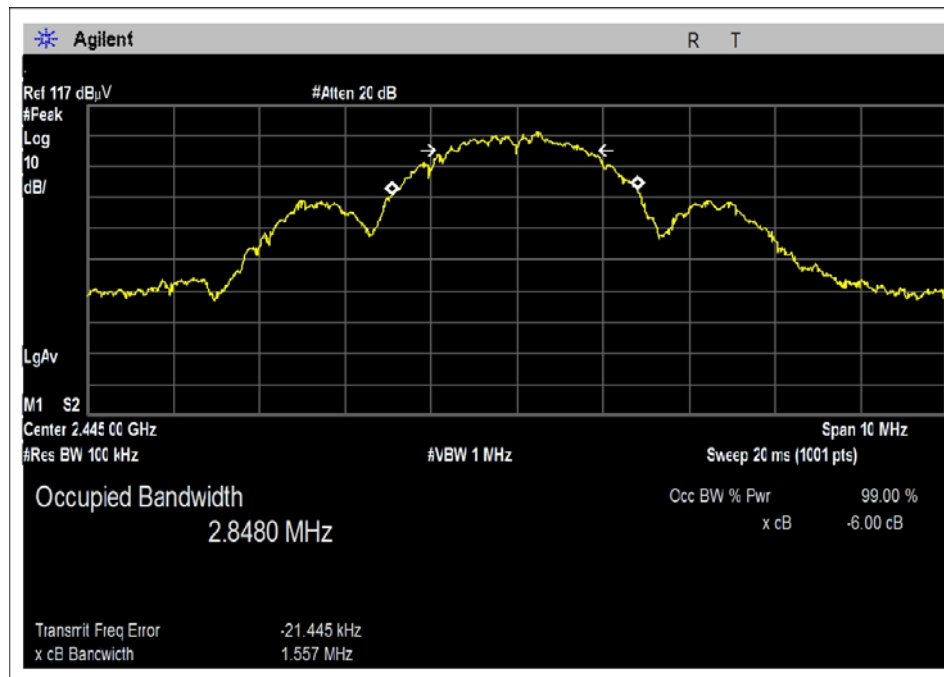
Test Data

| Frequency (MHz) | 6 BW (MHz) | 99% BW (MHz) | 26 dB BW (MHz) |
|-----------------|------------|--------------|----------------|
| 2405 | 1.583 | 2.9023 | 5.140 |
| 2445 | 1.557 | 2.8480 | 5.332 |
| 2480 | 1.647 | 2.8435 | 5.191 |

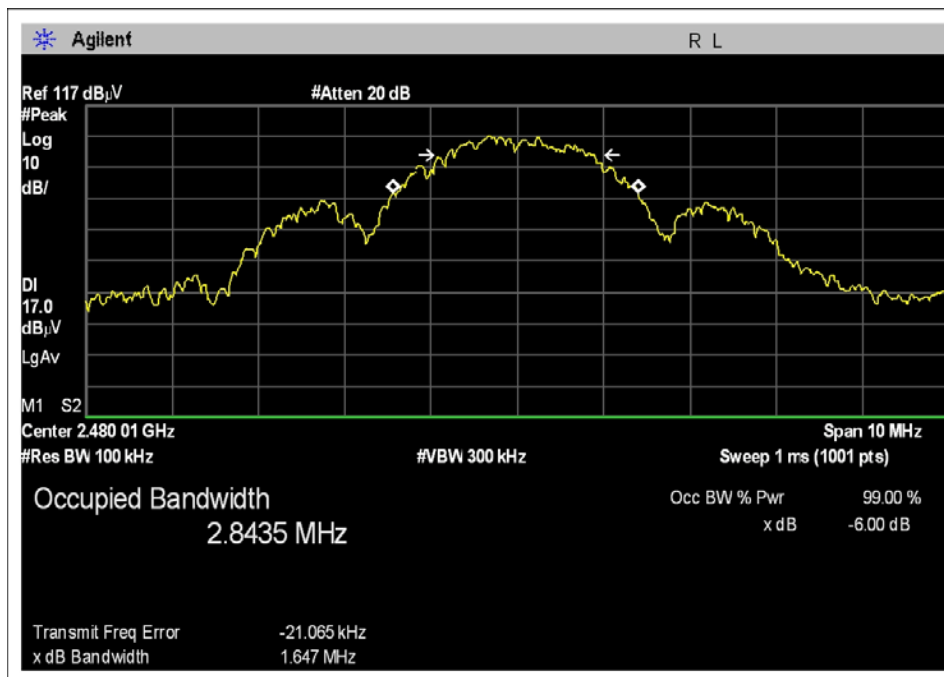
Test Plots



Occupied Bandwidth-99%+(-6dB)-Low Channel



Occupied Bandwidth-99%+(-6dB)-Mid Channel



Occupied Bandwidth-99%+(-6dB)-High Channel

Test Setup Photos



SUPPLEMENTAL INFORMATION

Measurement Uncertainty

| Uncertainty Value | Parameter |
|-------------------|---------------------------|
| 4.73 dB | Radiated Emissions |
| 3.34 dB | Mains Conducted Emissions |
| 3.30 dB | Disturbance Power |

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k=2$. Compliance is deemed to occur provided measurements are below the specified limits.

Emissions Test Details

TESTING PARAMETERS

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

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. 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 dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula. This reading was then compared to the applicable specification limit.

| SAMPLE CALCULATIONS | | |
|---------------------|---------------------|----------------|
| | Meter reading | (dB μ V) |
| + | Antenna Factor | (dB) |
| + | Cable Loss | (dB) |
| - | Distance Correction | (dB) |
| - | Preamplifier Gain | (dB) |
| = | Corrected Reading | (dB μ V/m) |

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions 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 highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. 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/receiver readings recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the measuring device 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 quasi-peak detector.

Average

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