

*FCC PART 15, SUBPART B and C
TEST REPORT*
for
**OCCUPANCY SENSOR
MODEL: SS2200**

Prepared for

 TELKONET, INC.
 20374 SENECA MEADOWS PARKWAY
 GERMANTOWN, MARYLAND 20876-7004

Prepared by: _____

KYLE FUJIMOTO

Approved by: _____

JAMES ROSS

 COMPATIBLE ELECTRONICS INC.
 114 OLINDA DRIVE
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 (714) 579-0500

DATE: DECEMBER 30, 2010

	REPORT BODY	APPENDICES					TOTAL
		A	B	C	D	E	
PAGES	17	2	2	2	10	7	40

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TABLE OF CONTENTS

Section / Title	PAGE
GENERAL REPORT SUMMARY	4
SUMMARY OF TEST RESULTS	5
1. PURPOSE	6
2. ADMINISTRATIVE DATA	7
2.1 Location of Testing	7
2.2 Traceability Statement	7
2.3 Cognizant Personnel	7
2.4 Date Test Sample was Received	7
2.5 Disposition of the Test Sample	7
2.6 Abbreviations and Acronyms	7
3. APPLICABLE DOCUMENTS	8
4. DESCRIPTION OF TEST CONFIGURATION	9
4.1 Description of Test Configuration - EMI	9
4.1.1 Cable Construction and Termination	10
5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT	11
5.1 EUT and Accessory List	11
5.2 EMI Test Equipment	12
6. TEST SITE DESCRIPTION	13
6.1 Test Facility Description	13
6.2 EUT Mounting, Bonding and Grounding	13
7. TEST PROCEDURES	14
7.1 RF Emissions	14
7.1.1 Conducted Emissions Test	14
7.1.2 Radiated Emissions (Spurious and Harmonics) Test	15
8. CONCLUSIONS	17

LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Accreditations and Recognitions
B	Modifications to the EUT
C	Additional Models Covered Under This Report
D	Diagrams, Charts, and Photos <ul style="list-style-type: none"> • Test Setup Diagrams • Radiated Emissions Photos • Antenna and Effective Gain Factors
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Plot Map And Layout of Test Site – 3 Meters

GENERAL REPORT SUMMARY

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

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

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

Device Tested: Occupancy Sensor
Model: SS2200
S/N: N/A

Product Description: See Expository Statement

Modifications: The EUT was not modified in order to meet the specifications.

Manufacturer: Telkonet, Inc.
20374 Seneca Meadows Parkway
Germantown, Maryland 20876-7004

Test Date: December 23, 2010

Test Specifications: EMI requirements
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249

Test Procedure: ANSI C63.4: 2009

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

SUMMARY OF TEST RESULTS

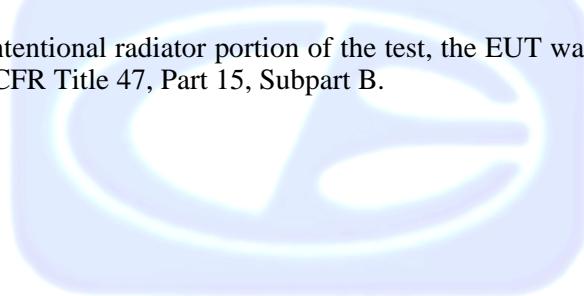
TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	This test was not performed because the EUT operates on battery power only and cannot be plugged in to the AC public mains.
2	Radiated RF Emissions 10 kHz – 9300 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.249 Highest reading in relation to spec limit: 52.71 (Avg) dBuV/m @ 5504.88 MHz (*U = 5.19 dB)
3	Radiated RF Emissions 10 kHz – 9300 MHz (Digital Portion)	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B.

*U = EXPANDED UNCERTAINTY WITH A COVERAGE FACTOR OF K=2

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Occupancy Sensor, Model: SS2200. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2009. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.

Note: For the unintentional radiator portion of the test, the EUT was within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B.



2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

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

2.3 Cognizant Personnel

Telkonet, Inc.

Robert Zirpoli Senior Applications Engineer

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer
James Ross Test Engineer

2.4 Date Test Sample was Received

The test sample was received prior to the date of testing.

2.5 Disposition of the Test Sample

The test sample was returned prior to the date of this report.

2.6 Abbreviations and Acronyms

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

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
N/A	Not Applicable

3. APPLICABLE DOCUMENTS

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

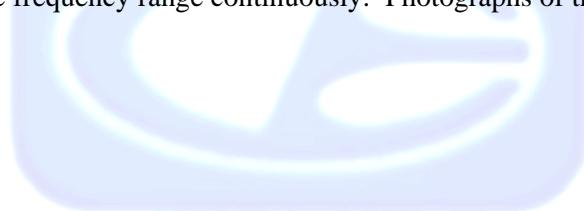
SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
ANSI C63.4 2009	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - EMI

The Occupancy Sensor, Model: SS2200 (EUT) was tested as a stand alone unit in two orthogonal axis. The EUT was continuously transmitting.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.



4.1.1 **Cable Construction and Termination**

The EUT has no external cables.



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

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
OCCUPANCY SENSOR (EUT)	TELKONET, INC.	SS2200	N/A	XV6PST-2200



5.2 EMI Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100218	April 9, 2009	April 9, 2011
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	2637A03618	June 1, 2010	June 1, 2011
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A13404	June 1, 2010	June 1, 2011
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	September 16, 2010	September 16, 2011
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Biconical Antenna	Com Power	AB-900	15250	June 18, 2010	June 18, 2011
Log Periodic Antenna	Com Power	AL-100	16252	June 9, 2010	June 9, 2011
Preamplifier	Com-Power	PA-102	1017	January 6, 2010	January 6, 2011
Loop Antenna	Com-Power	AL-130	17089	September 29, 2008	Sept. 29, 2011
Horn Antenna	Com-Power	AH-118	071175	March 18, 2010	March 18, 2012
Microwave Preamplifier	Com Power	PA-118	181656	December 22, 2010	December 22, 2011
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A

6. TEST SITE DESCRIPTION

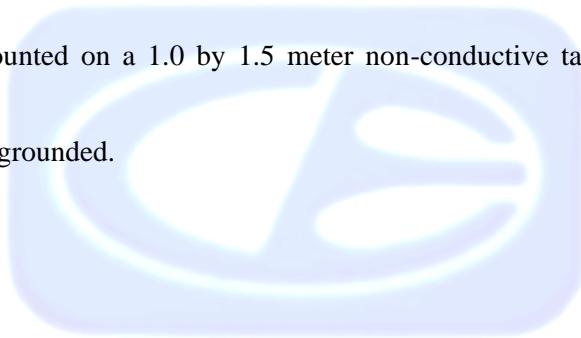
6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

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

The EUT was not grounded.



7. TEST PROCEDURES

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

7.1 RF Emissions

7.1.1 Conducted Emissions Test

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

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4: 2009. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

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

Test Results:

This test was not performed because the EUT operates on battery power only and cannot be plugged in to the AC public mains.

7.1.2

Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer and EMI Receiver were used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-102 was used for frequencies from 30 MHz to 1 GHz and the Com Power Microwave Preamplifier Model: PA-118 was used for frequencies above 1 GHz. The spectrum analyzer and EMI Receiver were used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer records the highest measured reading over all the sweeps.

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

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

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

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 9.3 GHz	1 MHz	Horn Antenna

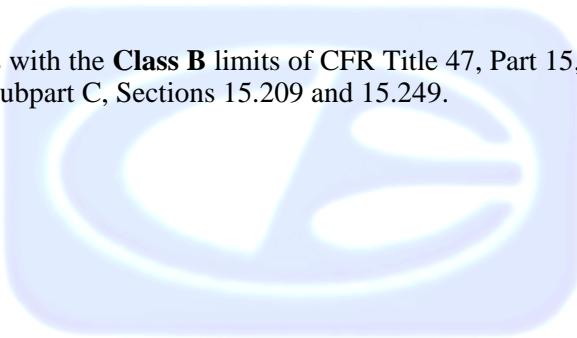
The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4: 2009. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT by the Radiated Emission Manual Test software. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

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

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

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.249.



8. CONCLUSIONS

The Occupancy Sensor, Model: SS2200, as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.249.

Note: For the unintentional radiator portion of the test, the EUT was within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B.



APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

Brea Division
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(714) 579-0500

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LABORATORY ACCREDITATIONS AND RECOGNITIONS



For US, Canada, Australia/New Zealand, Taiwan and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025 an ISO 9002 equivalent. Please follow the link to the NIST site for each of our facilities NVLAP certificate and scope of accreditation.

NVLAP listing links

Agoura Division - <http://ts.nist.gov/Standards/scopes/2000630.htm>

Brea Division - <http://ts.nist.gov/Standards/scopes/2005280.htm>

Silverado/Lake Forest Division - <http://ts.nist.gov/Standards/scopes/2005270.htm>



ANSI listing

CETCB

<https://www.ansica.org/wwwversion2/outside/ALLdirectoryDetails.asp?menuID=1&prgID=3&orgID=123&status=4>



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA).



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA).

We are also certified/listed for IT products by the following country/agency:



VCCI Listing, from VCCI site

[Enter "Compatible" in search form](http://www.vcci.or.jp/vcci_e/activity/registration/setsubi.html) http://www.vcci.or.jp/vcci_e/activity/registration/setsubi.html



FCC Listing, from FCC OET site

[FCC test lab search](https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm) <https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm>



Compatible Electronics IC listing can be found at:
<http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home>

APPENDIX B

MODIFICATIONS TO THE EUT

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MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.249 specifications.

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

There were no modifications made to the EUT.



APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

Brea Division
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Agoura Division
2337 Troutdale Drive
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ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Occupancy Sensor
Model: SS2200
S/N: N/A

There were no additional models covered under this test report.



APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

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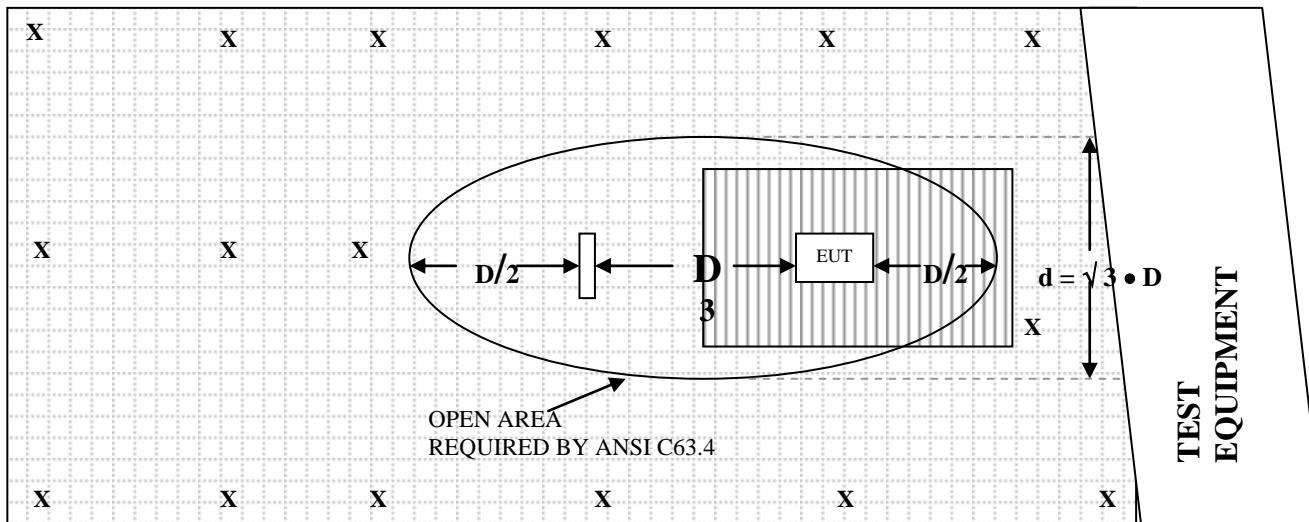
Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

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

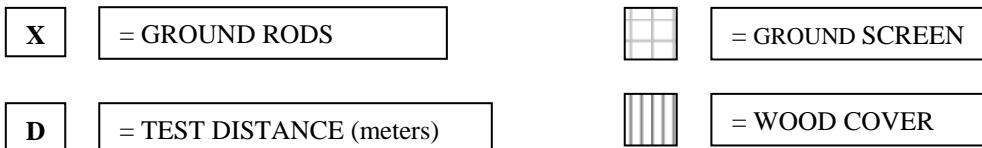
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(949) 587-0400

FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS



COM-POWER AB-900**BICONICAL ANTENNA****S/N: 15250****CALIBRATION DATE: JUNE 18, 2010**

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	12.8	100	11.5
35	11.3	120	13.6
40	10.8	140	12.5
45	10.1	160	13.2
50	11.0	180	15.5
60	11.1	200	16.9
70	7.3	250	16.4
80	7.5	275	18.7
90	8.3	300	19.5

COM-POWER AL-100**LOG PERIODIC ANTENNA****S/N: 16252****CALIBRATION DATE: JUNE 9, 2010**

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.7	700	19.5
400	16.1	800	20.9
500	16.9	900	20.8
600	20.1	1000	21.5

COM-POWER PA-102
PREAMPLIFIER
S/N: 1017
CALIBRATION DATE: JANUARY 6, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.3	300	38.2
40	38.4	350	38.1
50	38.2	400	38.5
60	38.2	450	38.0
70	38.3	500	37.9
80	38.1	550	38.2
90	38.2	600	38.2
100	38.3	650	37.7
125	38.2	700	38.3
150	38.3	750	38.3
175	38.3	800	37.4
200	38.1	850	37.5
225	38.2	900	37.6
250	38.3	950	37.4
275	38.2	1000	37.3

COM POWER AH-118
HORN ANTENNA
S/N: 071175
CALIBRATION DATE: MARCH 18, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	22.2	10.0	39.8
1.5	24.2	10.5	40.2
2.0	27.2	11.0	39.7
2.5	27.8	11.5	39.9
3.0	30.5	12.0	41.7
3.5	30.9	12.5	42.7
4.0	31.9	13.0	42.3
4.5	33.2	13.5	40.3
5.0	33.6	14.0	42.6
5.5	36.2	14.5	43.4
6.0	35.8	15.0	41.9
6.5	36.1	15.5	40.8
7.0	37.9	16.0	41.0
7.5	37.4	16.5	41.5
8.0	38.0	17.0	44.5
8.5	38.8	17.5	47.6
9.0	38.0	18.0	50.8
9.5	39.2		

COM-POWER PA-118
PREAMPLIFIER
S/N: 181656
CALIBRATION DATE: DECEMBER 22, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.90	10.0	26.07
1.5	26.50	10.5	24.97
2.0	26.79	11.0	24.79
2.5	26.90	11.5	24.33
3.0	27.03	12.0	24.24
3.5	26.94	12.5	24.92
4.0	27.18	13.0	24.52
4.5	26.79	13.5	24.33
5.0	26.25	14.0	24.56
5.5	26.16	14.5	24.99
6.0	25.52	15.0	26.06
6.5	25.29	15.5	26.87
7.0	24.45	16.0	25.95
7.5	24.18	16.5	24.69
8.0	24.02	17.0	24.20
8.5	24.54	17.5	25.12
9.0	24.91	18.0	26.03
9.5	25.42		

COM-POWER AL-130
LOOP ANTENNA
S/N: 17089
CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.57	9.93
0.01	-42.06	9.44
0.02	-42.43	9.07
0.05	-42.50	9.00
0.07	-42.10	9.40
0.1	-42.03	9.47
0.2	-44.50	7.00
0.3	-41.93	9.57
0.5	-41.90	9.60
0.7	-41.73	9.77
1	-41.23	10.27
2	-40.90	10.60
3	-41.20	10.30
4	-41.30	10.20
5	-40.70	10.80
10	-41.10	10.40
15	-42.17	9.33
20	-42.00	9.50
25	-42.20	9.30
30	-43.10	8.40

**FRONT VIEW**

TELKONET, INC.
OCCUPANCY SENSOR
MODEL: SS2200

FCC SUBPART B AND C – RADIATED EMISSIONS

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

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**REAR VIEW**

TELKONET, INC.
OCCUPANCY SENSOR
MODEL: SS2200
FCC SUBPART B AND C – RADIATED EMISSIONS

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

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APPENDIX E

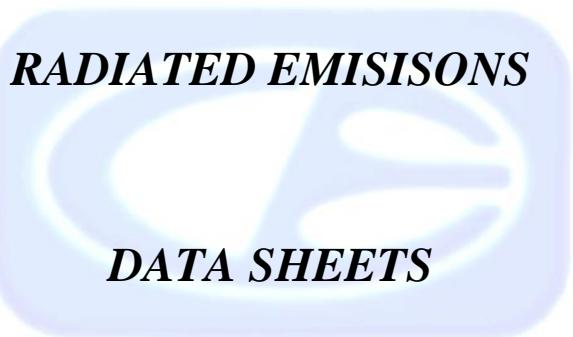
DATA SHEETS

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RADIATED EMISISONS

DATA SHEETS

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

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

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

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

FCC 15.249

 Telkonet, Inc.
 Occupancy Sensor
 Model: SS2200

 Date: 12/23/2010
 Labs: B and D
 Tested By: Kyle Fujimoto

Ceiling Mount

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
917.48	81.56	V	94	-12.44	Peak	1.25	135	
1834.96	39.16	V	74	-34.84	Peak	1.25	135	
1834.96	31.41	V	54	-22.59	Avg	1.25	135	
2752.44	36.71	V	74	-37.29	Peak	1.35	145	
2752.44	24.54	V	54	-29.46	Avg	1.35	145	
3669.92	39.78	V	74	-34.22	Peak	1.25	155	
3669.92	26.84	V	54	-27.16	Avg	1.25	155	
4587.4	44.71	V	74	-29.29	Peak	1.25	135	
4587.4	34.97	V	54	-19.03	Avg	1.25	135	
5504.88	50.86	V	74	-23.14	Peak	1.25	155	
5504.88	49.57	V	54	-4.43	Avg	1.25	155	
6422.36	49.48	V	74	-24.52	Peak	1.35	165	
6422.36	36.67	V	54	-17.33	Avg	1.35	165	
7339.84	49.43	V	74	-24.57	Peak	1.25	175	
7339.84	37.12	V	54	-16.88	Avg	1.25	175	
8257.32	52.11	V	74	-21.89	Peak	1.35	185	
8257.32	39.55	V	54	-14.45	Avg	1.35	185	
9174.8	52.23	V	74	-21.77	Peak	1.25	175	
9174.8	39.56	V	54	-14.44	Avg	1.25	175	

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Ceiling Mount

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
917.48	83.52	H	94	-10.48	Peak	1.25	180	
1834.96	35.07	H	74	-38.93	Peak	1.25	155	
1834.96	21.12	H	54	-32.88	Avg	1.25	155	
2752.44	38.21	H	74	-35.79	Peak	1.25	135	
2752.44	24.46	H	54	-29.54	Avg	1.25	135	
3669.92	39.12	H	74	-34.88	Peak	1.55	135	
3669.92	27.05	H	54	-26.95	Avg	1.55	135	
4587.4	42.29	H	74	-31.71	Peak	1.45	155	
4587.4	29.79	H	54	-24.21	Peak	1.45	155	
5504.88	52.34	H	74	-21.66	Peak	1.25	135	
5504.88	47.23	H	54	-6.77	Avg	1.25	135	
6422.45	49.16	H	74	-24.84	Peak	1.35	125	
6422.4	36.65	H	54	-17.35	Avg	1.35	125	
7339.84	48.71	H	74	-25.29	Peak	1.25	125	
7339.84	36.72	H	54	-17.28	Avg	1.25	125	
8257.32	52.49	H	74	-21.51	Peak	1.35	135	
8257.32	38.99	H	54	-15.01	Avg	1.35	135	
9174.8	50.88	H	74	-23.12	Peak	1.25	145	
9174.8	39.01	H	54	-14.99	Avg	1.25	145	

FCC 15.249

Telkonet, Inc.
Occupancy Sensor
Model: SS2200

Date: 12/23/2010
Labs: B and D
Tested By: Kyle Fujimoto

Wall Mount

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
917.48	89.95	V	94	-4.05	Peak	1	0	
1834.96	37.01	V	74	-36.99	Peak	1.25	135	
1834.96	26.72	V	54	-27.28	Avg	1.25	135	
2752.44	37.26	V	74	-36.74	Peak	1.35	155	
2752.44	24.31	V	54	-29.69	Avg	1.35	155	
3669.92	38.91	V	74	-35.09	Peak	1.25	165	
3669.92	26.83	V	54	-27.17	Avg	1.25	165	
4587.4	42.51	V	74	-31.49	Peak	1.35	175	
4587.4	29.36	V	54	-24.64	Avg	1.35	175	
5504.88	55.91	V	74	-18.09	Peak	1.25	45	
5504.88	52.71	V	54	-1.29	Avg	1.25	45	
6422.36	49.01	V	74	-24.99	Peak	1.35	155	
6422.36	36.61	V	54	-17.39	Avg	1.35	155	
7339.84	48.99	V	74	-25.01	Peak	1.25	45	
7339.84	36.72	V	54	-17.28	Avg	1.25	45	
8257.32	50.37	V	74	-23.63	Peak	1.25	155	
8257.32	38.97	V	54	-15.03	Avg	1.25	155	
9174.8	51.45	V	74	-22.55	Peak	1.35	155	
9174.8	39.48	V	54	-14.52	Avg	1.351	155	

FCC 15.249

 Telkonet, Inc.
 Occupancy Sensor
 Model: SS2200

 Date: 12/23/2010
 Labs: B and D
 Tested By: Kyle Fujimoto

Wall Mount

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
917.48	85.25	H	94	-8.75	Peak	1.5	0	
1835	41.04	H	74	-32.96	Peak	1.25	45	
1835	35.89	H	54	-18.11	Avg	1.25	45	
2752.44	37.74	H	74	-36.26	Peak	1.25	315	
2752.44	25.37	H	54	-28.63	Avg	1.25	315	
3669.92	39.51	H	74	-34.49	Peak	1.25	225	
3669.92	27.03	H	54	-26.97	Avg	1.25	225	
4587.4	47.28	H	74	-26.72	Peak	1.25	0	
4587.4	43.17	H	54	-10.83	Peak	1.25	0	
5504.9	55.95	H	74	-18.05	Peak	1.25	45	
5504.9	52.66	H	54	-1.34	Avg	1.25	45	
6422.4	52.21	H	74	-21.79	Peak	1.25	45	
6422.4	40.81	H	54	-13.19	Avg	1.25	45	
7339.84	48.18	H	74	-25.82	Peak	1.25	0	
7339.84	36.79	H	54	-17.21	Avg	1.25	0	
8257.32	50.01	H	74	-23.99	Peak	1.25	0	
8257.32	38.94	H	54	-15.06	Avg	1.25	0	
9174.8	51.46	H	74	-22.54	Peak	1.25	45	
9174.8	39.42	H	54	-14.58	Avg	1.25	45	



COMPATIBLE ELECTRONICS

Report Number: B01223D1
FCC Part 15 Subpart B and FCC Section 15.249 Test Report
Occupancy Sensor
Model: SS2200

Page E7

FCC 15.249 and FCC Class B

Telkonet, Inc.

Occupancy Sensor

Model: SS2200

Date: 12/23/2010

Labs: B and D

Tested By: Kyle Fujimoto

Ceiling Mount (Worst Case)

Digital Portion and Non-Harmonic Emissions from the Transmitter

Vertical and Horizontal Polarizations

**Brea Division
114 Olinda Drive
Brea, CA 92823
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Agoura Division
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19121 El Toro Road
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**Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400**