

*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

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DATE: NOVEMBER 11, 2009

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	17	2	2	2	10	7	40

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## GENERAL REPORT SUMMARY

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

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

This report must not be used to claim product endorsement by NVLAP 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: June 18, 2009

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: 2003

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: 53.31 dBuV/m @ 7339.84 MHz (*Uc = 3.05 dB)
3	Radiated RF Emissions 10 kHz – 9300 MHz (Digital and Receiver Portion)	Complies with the <b>Class B</b> limits of CFR Title 47, Part 15, Subpart B.

## 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: 2003. 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.

Rob Richmond      Engineer

Compatible Electronics Inc.

Kyle Fujimoto      Test Engineer  
Michael Christensen      Lab Manager, Brea Division

### 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 2003	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	<b>XV6PST2200</b>





## 5.2 EMI Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
<b>GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS</b>					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08768	August 22, 2008	Aug. 22, 2009
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22262	August 22, 2008	Aug. 22, 2009
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	August 22, 2008	Aug. 22, 2009
EMI Receiver	Rohde & Schwarz	ESIB40	100194	September 17, 2008	Sept. 17, 2010
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
<b>RF RADIATED EMISSIONS TEST EQUIPMENT</b>					
Biconical Antenna	Com Power	AB-900	15182	February 23, 2009	Feb. 23, 2010
Log Periodic Antenna	Com Power	AL-100	16252	June 15, 2009	June 15, 2010
Preamplifier	Com-Power	PA-103	1582	January 12, 2009	Jan. 12, 2010
Loop Antenna	Com-Power	AL-130	17089	September 29, 2008	Sept. 29, 2009
Horn Antenna	Com-Power	AH-118	071175	June 27, 2008	June 27, 2010
Microwave Preamplifier	Com Power	PA-122	181921	March 12, 2009	March 12, 2010
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: 2003. 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-103 was used for frequencies from 30 MHz to 1 GHz and the Com Power Microwave Preamplifier Model: PA-122 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: 2003. 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 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 and receiver 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 RECOGNITIONS***

---

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## ***LABORATORY RECOGNITIONS***

**Compatible Electronics has the following agency accreditations:**

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

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

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

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

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

Federal Communications Commission

Industry Canada

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## 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***

---

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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***

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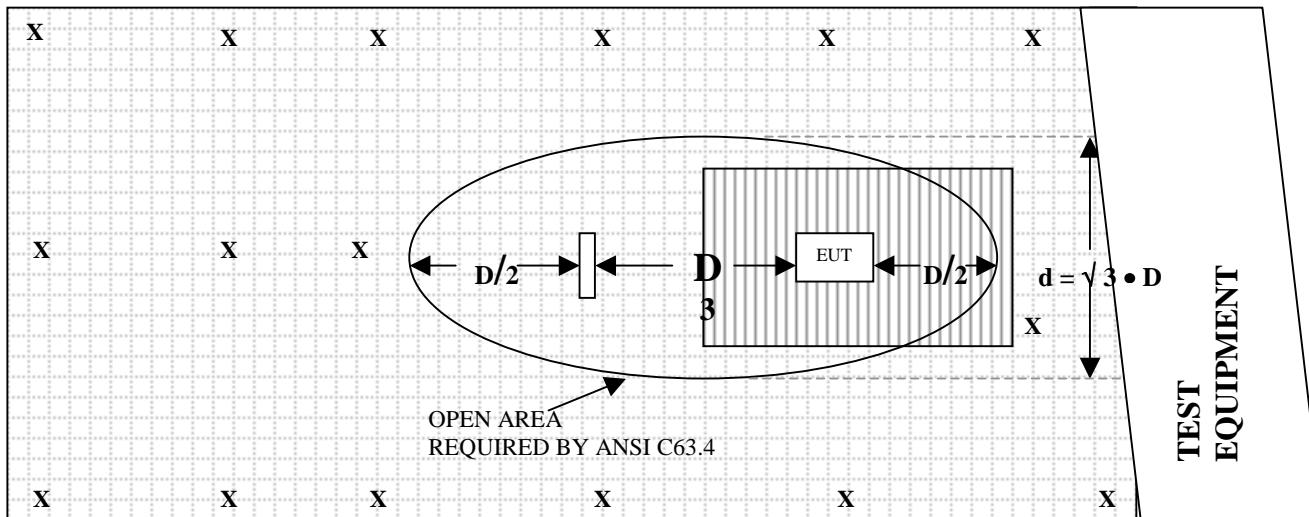
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**FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS**

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

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

**COM-POWER AB-900****BICONICAL ANTENNA****S/N: 15182****CALIBRATION DATE: FEBRUARY 23, 2009**

<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>
30	13.1	100	10.6
35	10.1	120	12.7
40	9.5	140	11.7
45	10.9	160	12.6
50	11.3	180	15.7
60	8.4	200	16.8
70	8.1	250	15.0
80	5.7	275	17.5
90	7.3	300	19.2

**COM-POWER AL-100****LOG PERIODIC ANTENNA****S/N: 16252****CALIBRATION DATE: JUNE 15, 2009**

<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>
300	12.8	700	20.4
400	15.3	800	21.7
500	17.5	900	22.0
600	19.8	1000	22.7

# COM-POWER PA-103

## PREAMPLIFIER

S/N: 1582

CALIBRATION DATE: JANUARY 12, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	33.6	300	33.4
40	33.7	350	33.2
50	33.6	400	33.2
60	33.5	450	33.1
70	33.6	500	32.9
80	33.6	550	33.0
90	33.7	600	32.8
100	33.7	650	33.0
125	33.5	700	32.7
150	33.6	750	32.9
175	33.7	800	32.6
200	33.4	850	32.6
225	33.4	900	32.6
250	33.4	950	32.4
275	33.3	1000	32.7

**COM POWER AH-118**
**HORN ANTENNA**
**S/N: 071175**
**CALIBRATION DATE: JUNE 27, 2008**

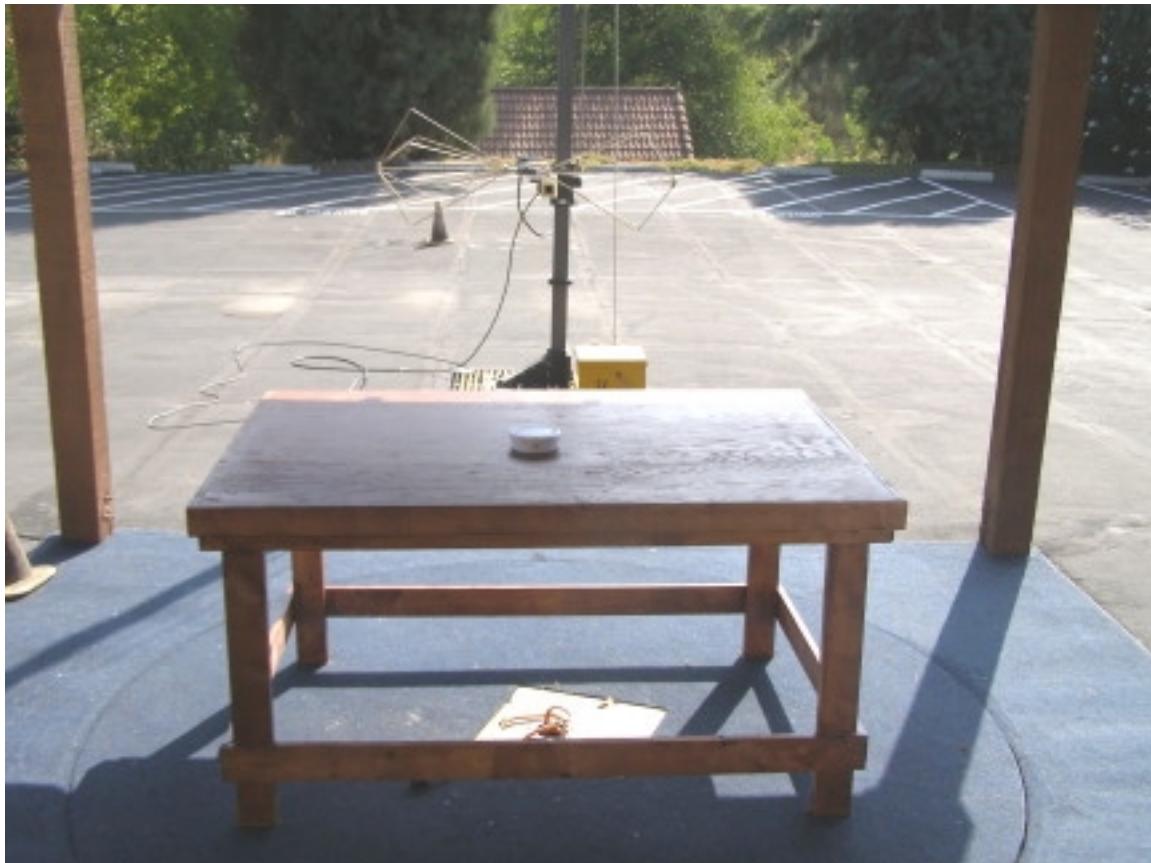
<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>
1.0	24.5	10.0	39.4
1.5	25.4	10.5	39.7
2.0	28.3	11.0	39.0
2.5	28.9	11.5	40.0
3.0	29.7	12.0	39.7
3.5	30.8	12.5	41.7
4.0	31.4	13.0	42.7
4.5	32.6	13.5	41.2
5.0	33.7	14.0	41.6
5.5	34.4	14.5	43.2
6.0	34.7	15.0	42.3
6.5	35.4	15.5	39.3
7.0	37.0	16.0	41.7
7.5	37.4	16.5	39.6
8.0	37.6	17.0	43.0
8.5	37.6	17.5	47.1
9.0	38.5	18.0	46.2
9.5	38.6		

**COM-POWER PA-122**
**PREAMPLIFIER**
**S/N: 181921**
**CALIBRATION DATE: MARCH 12, 2009**

<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>
1.0	36.46	10.0	35.06
1.5	35.36	10.5	34.82
2.0	34.76	11.0	33.12
2.5	34.94	11.5	34.33
3.0	34.59	12.0	34.75
3.5	34.55	12.5	33.94
4.0	34.25	13.0	35.50
4.5	33.89	13.5	34.89
5.0	34.22	14.0	36.56
5.5	34.81	14.5	36.06
6.0	35.74	15.0	36.67
6.5	36.51	15.5	36.84
7.0	36.66	16.0	34.31
7.5	35.72	16.5	35.11
8.0	33.28	17.0	35.35
8.5	33.11	17.5	34.11
9.0	34.71	18.0	33.88
9.5	35.50	18.5	32.20

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

<b>FREQUENCY (MHz)</b>	<b>MAGNETIC (dB/m)</b>	<b>ELECTRIC (dB/m)</b>
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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**(949) 587-0400**

***RADIATED EMISISONS***

***DATA SHEETS***

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

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

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

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

**FCC 15.249**

 Telkonet, Inc.  
 Occupancy Sensor  
 Model: SS2200

 Date: 06/18/09  
 Labs: A and B  
 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	86.98	V	94	-7.02	Peak	1	90	
1834.96	48.16	V	74	-25.84	Peak	1.58	135	
1834.96	44.24	V	54	-9.76	Avg	1.58	135	
2752.44	38.87	V	74	-35.13	Peak	1.19	135	
2752.44	25.66	V	54	-28.34	Avg	1.19	135	
3669.92	39.09	V	74	-34.91	Peak	1.19	150	
3669.92	27.55	V	54	-26.45	Avg	1.19	150	
4587.4	41.48	V	74	-32.52	Peak	1.99	125	
4587.4	30.21	V	54	-23.79	Avg	1.99	125	
5504.88	51.24	V	74	-22.76	Peak	2.05	315	
5504.88	48.05	V	54	-5.95	Avg	2.05	315	
6422.36	43.86	V	74	-30.14	Peak	1.06	135	
6422.36	31.94	V	54	-22.06	Avg	1.06	135	
7339.84	54.52	V	74	-19.48	Peak	1.05	135	
7339.84	51.47	V	54	-2.53	Avg	1.05	135	
8257.32	50.45	V	74	-23.55	Peak	1.05	150	
8257.32	41.86	V	54	-12.14	Avg	1.05	150	
9174.8	51.42	V	74	-22.58	Peak	1.09	1.26	
9174.8	43.87	V	54	-10.13	Avg	1.09	1.26	

**FCC 15.249**

 Telkonet, Inc.  
 Occupancy Sensor  
 Model: SS2200

 Date: 06/18/09  
 Labs: A and B  
 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	94.38	H	94	0.38	Peak	1	45	
917.48	93.12	H	94	-0.88	QP	1	45	
1834.96	50.02	H	74	-23.98	Peak	1	45	
1834.96	48.11	H	54	-5.89	Avg	1	45	
2752.44	37.12	H	74	-36.88	Peak	1.45	150	
2752.44	33.15	H	54	-20.85	Avg	1.45	150	
3669.92	40.19	H	74	-33.81	Peak	2.2	315	
3669.92	36.58	H	54	-17.42	Avg	2.24	315	
4587.4	42.68	H	74	-31.32	Peak	1.52	135	
4587.4	39.58	H	54	-14.42	Avg	1.52	135	
5504.88	51.19	H	74	-22.81	Peak	1.52	225	
5504.88	48.75	H	54	-5.25	Avg	1.52	225	
6422.36	46.75	H	74	-27.25	Peak	1.86	135	
6422.36	43.58	H	54	-10.42	Avg	1.86	135	
7339.84	53.5	H	74	-20.5	Peak	1.32	150	
7339.84	49.72	H	54	-4.28	Avg	1.32	150	
8257.32	46.73	H	74	-27.27	Peak	1.31	135	
8257.32	35.05	H	54	-18.95	Avg	1.31	135	
9174.8	50.37	H	74	-23.63	Peak	1.66	315	
9174.8	47.58	H	54	-6.42	Avg	1.66	315	



**FCC 15.249**

Telkonet, Inc.  
Occupancy Sensor  
Model: SS2200

Date: 06/18/09  
Labs: A and B  
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	88.78	V	94	-5.22	Peak	1	135	
1834.96	45.96	V	74	-28.04	Peak	1.35	150	
1834.96	43.97	V	54	-10.03	Avg	1.35	150	
2752.44	38.21	V	74	-35.79	Peak	1.58	150	
2752.44	35.26	V	54	-18.74	Avg	1.58	150	
3669.92	40.38	V	74	-33.62	Peak	1.59	150	
3669.92	36.58	V	54	-17.42	Avg	1.59	150	
4587.4	42.16	V	74	-31.84	Peak	1.58	150	
4587.4	38.52	V	54	-15.48	Avg	1.58	150	
5504.88	55.53	V	74	-18.47	Peak	1.05	45	
5504.88	52.91	V	54	-1.09	Avg	1.05	45	
6422.36	47.61	V	74	-26.39	Peak	1.25	135	
6422.36	43.58	V	54	-10.42	Avg	1.25	135	
7339.84	51.06	V	74	-22.94	Peak	1.05	45	
7339.84	42.34	V	54	-11.66	Avg	1.05	45	
8257.32	50.19	V	74	-23.81	Peak	1.25	135	
8257.32	46.18	V	54	-7.82	Avg	1.25	135	
9174.8	50.02	V	74	-23.98	Peak	1.13	135	
9174.8	46.58	V	54	-7.42	Avg	1.13	135	

**FCC 15.249**

 Telkonet, Inc.  
 Occupancy Sensor  
 Model: SS2200

 Date: 06/18/09  
 Labs: A and B  
 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	90.28	H	94	-3.72	Peak	1	90	
1834.96	45.92	H	74	-28.08	Peak	1.25	135	
1834.96	41.92	H	54	-12.08	Avg	1.25	135	
2752.44	38.36	H	74	-35.64	Peak	1.25	150	
2752.44	34.58	H	54	-19.42	Avg	1.25	150	
3669.92	40.79	H	74	-33.21	Peak	1.25	135	
3669.92	36.78	H	54	-17.22	Avg	1.25	135	
4587.4	43.33	H	74	-30.67	Peak	1.19	150	
4587.4	39.95	H	54	-14.05	Avg	1.19	150	
5504.88	49.64	H	74	-24.36	Peak	1.09	125	
5504.88	45.69	H	54	-8.31	Avg	1.09	125	
6422.36	47.11	H	74	-26.89	Peak	1.19	150	
6422.36	43.25	H	54	-10.75	Avg	1.19	150	
7339.84	55.61	H	74	-18.39	Peak	1.25	0	
7339.84	53.31	H	54	-0.69	Avg	1.25	0	
8257.32	50.01	H	74	-23.99	Peak	1.35	125	
8257.32	41.98	H	54	-12.02	Avg	1.35	125	
9174.8	51.01	H	74	-22.99	Peak	1.05	125	
9174.8	49.58	H	54	-4.42	Avg	1.05	125	



# COMPATIBLE ELECTRONICS

Report Number: B90618D1

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FCC Part 15 Subpart B and FCC Section 15.249 Test Report

## *Occupancy Sensor*

*Model: SS2200*

Model: 552200

FCC 15.249 and FCC Class B

Telkonet, Inc.

## Occupancy Sensor

Model: SS2200

Date: 06/18/09

## Labs: A and B

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  
(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**