FCC PART 15, SUBPART B and C
TEST REPORT

for

ECOCONTACT PLUS

MODEL: SS6255

Prepared for

TELKONET, INC.
10200 INNOVATION DRIVE, SUITE 300
MILWAUKEE, WISCONSIN 53226

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

JAMES ROSS

COMPATIBLE ELECTRONICS INC.
114 OLINDA DRIVE
BREA, CALIFORNIA 92823
(714) 579-0500

DATE: OCTOBER 5, 2016

	REPORT BODY	APPENDICES					TOTAL
		A	***B***	***C***	***D***	***E***	
PAGES	17	2	2	2	13	36	**72**

This report shall not be reproduced except in full, without the written approval of Compatible Electronics.

NVLAP®
TESTING
NVLAP LAB CODE 200528-0

TABLE OF CONTENTS

LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Accreditations and Recognitions
B	Modifications to the EUT
C	Additional Models Covered Under This Report
D	Diagrams and Charts • Test Setup Diagrams • Antenna and Effective Gain Factors
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Conducted Emissions Test Setup
2	Layout of the Semi-Anechoic Test Chamber

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 certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested:	EcoContact Plus Model: SS6255
Serial Number:	N/A
Product Description:	The EUT is a wireless magnetic sensor.
Modifications:	The EUT was not modified in order to meet the specifications.
Customer:	Telkonet, Inc. 10200 Innovaton Drive, Suite 300 Milwaukee, Wisconsin 53226
Test Dates:	February 10 and 15, 2016

Test Specification covered by accreditation:

NVLAP®
TESTING
NVLAP LAB CODE 200528-0

Test Specifications:	Emissions requirements CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.
Test Procedure:	ANSI C63.4, ANSI C63.10
Test Deviations:	The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	**DESCRIPTION**	**RESULTS**
1	Spurious Radiated RF Emissions, 10 kHz – 25000 MHz (Transmitter, Receiver, and Digital portion)	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, section 15.205, 15.209 and 15.249. Highest reading in relation to spec limit: 89.50 (Avg) dBuV/m @ 2405 MHz (*U = 3.70 dB)
2	Conducted RF Emissions, AC Lines, 150 kHz – 30 MHz	This test was not performed because the EUT operates on battery power only and cannot be connected to the AC public mains.

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the EcoContact Plus, Model: SS6255. The emissions measurements were performed according to the measurement procedure described in ANSI C63.4 and ANSI C63.10. 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.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions 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.

Jeff Sobieski	CTO

Compatible Electronics Inc.

Kyle Fujimoto	Test Engineer
James Ross	Test Engineer

2.4 Date Test Sample was Received

The test sample was received on February 10, 2016.

2.5 Disposition of the Test Sample

The test sample has not been returned to Telkonet, Inc. as of the date of this test 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
LISN	Line Impedance Stabilization Network
N/A	Not Applicable
Tx	Transmit
Rx	Receive

3. APPLICABLE DOCUMENTS

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

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules – Radio frequency devices (including digital devices) – Intentional Radiators
FCC Title 47, Part 15 Subpart B	FCC Rules – Radio frequency devices (including digital devices) – Unintentional Radiators
EN 50147-2: 1997	Anechoic chambers. Alternative test site suitability with respect to site attenuation
ANSI C63.4 2014	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – Emissions

The EcoContact Plus, Model: SS6255 (EUT) was tested as a stand alone device. The EUT operates on one "AAA" battery. A fresh battery was used prior to the testing.

For configurating the EUT for the intentional radiator portion of the test: The EUT was connected to a laptop that had a program that locked one channel at a time so that the low, middle, and high channels could be tested. The EUT was tested in three orthogonal axis. The carrier was modulated in the same way it would be when the EUT was in its normal operating mode.

For configurating the EUT for the unintentional radiator portion of the test: The EUT was connected to a laptop that allowed the EUT to function as per typical normal usage.

Note: The laptop was only connected to the EUT to program the correct configuration and then was removed during the testing.

The X orientation is when the EUT is parallel to the ground. The Y orientation is when the EUT is perpendicular to the ground mounted vertically. The Z orientation is when the EUT is perpendicular to the ground mounted horizontally.

4.1.1 Cable Construction and Termination

The EUT had no external cables.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
ECOCONTACT PLUS	TELKONET, INC.	SS6255	N/A	XV6SS6255
LAPTOP*	HEWLETT PACKARD	G60-441US	2CE927RF3Q	N/A
TEST SOFTWARE	TELKONET, INC.	WOS	N/A	N/A

*Only used to program the EUT, the laptop was removed prior to testing.

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT USED IN LAB D					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Agilent Technologies	N9038A	MY51210150	December 29, 2015	1 Year
RF RADIATED EMISSIONS TEST EQUIPMENT					
CombiLog Antenna	Com-Power	AC-220	61060	September 3, 2015	1 Year
Loop Antenna	Com-Power	AL-130	17089	February 6, 2015	2 Year
Horn Antenna	Com-Power	AH-826	71957	N/A	N/A
Horn Antenna	Com-Power	AH-118	071175	February 26, 2014	2 Year
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A
Preamplifier	Com-Power	PA-118	551024	March 6, 2015	1 Year
Preamplifier	Com-Power	PA-840	711013	May 13, 2014	2 Year

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

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

6.2 EUT Mounting, Bonding and Grounding

For frequencies 1 GHz and below: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

For frequencies above 1 GHz: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 1.5 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 EMI Receiver was used as a measuring meter. A quasi-peak and/or average reading was taken only where indicated in the data sheets. A transient limiter was used for the protection of the EMI Receiver input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the EMI Receiver. 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 63:4. 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 computer software. 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 connected to the AC public mains.

7.1.2 Radiated Emissions Test

The EMI Receiver was used as the measuring meter. A built-in, internal preamplifier was used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets. The effective measurement bandwidth used for the radiated emissions test was according to the frequency measured (200 Hz for 10 kHz to 150 kHz, 9 kHz for 150 kHz to 30 MHz, 120 kHz for 30 MHz to 1 GHz and 1 MHz for 1 GHz to 25 GHz).

The fundamental and harmonic frequencies above 1 GHz were averaged by a "duty cycle correction factor", derived from 20 Log (dwell time / 100ms). This duty cycle correction factor was then subtracted from the peak reading. There were no non-transmitter related spurious emissions detected above 1 GHz.

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4, EN 50147-2 and CISPR 22. 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. 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 EUT was tested at a 3-meter test distance. The six highest emissions are listed in Table 2.0.

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	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	CombiLog Antenna
1 GHz to 25 GHz	1 MHz	Horn Antenna

Test Results:

The EUT complies with the **Class B** limits of **CFR** Title 47, Part 15, Subpart B; and Subpart C sections 15.205, 15.209 and 15.249 for radiated emissions.

7.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
EcoContact Plus
Model: SS6255

Frequency MHz	EMI Reading (dBuV/m)	Specification Limit (dBuV/m)	Delta (Cor. Reading – Spec. Limit) dB)
2405 (H) (Z-Axis)	89.50 (AVG)	93.97	-4.47
2405 (V) (X-Axis)	89.23 (AVG)	93.97	-4.74
2440 (V) (Z-Axis)	89.22 (AVG)	93.97	-4.76
2440 (H) (Y-Axis)	88.86 (AVG)	93.97	-5.11
2440 (V) (Y-Axis)	88.37 (AVG)	93.97	-5.60
2405 (H) (Z-Axis)	87.25 (AVG)	93.97	-6.72

Notes:
* The complete emissions data is given in Appendix E of this report.
(V) Vertical
(H) Horizontal
(AVG) Average

7.2 Fundamental Field Strength (Duty Cycle Calculations)

The Peak Transmit Radiated Field Strength was measured at a 3-meter test distance. The EMI Receiver was used to obtain the duty cycle. The data sheets are located in Appendix E.

Where

$$\delta(\mathrm{dB}) = 20\log\left[\sum\left(nt_1 + mt_2 + \ldots + \xi t_x\right)/T\right]$$

n is the number of pulses of duration *t*1
m is the number of pulses of duration *t*2
ξ is the number of pulses of duration *tx*
T is the period of the pulse train or 100 ms if the pulse train length is greater than 100 ms

See Appendix E for more details and the calculations.

7.3 Variation of the Input Power

The variation of the input power test was performed using the EMI Receiver. The EUT input power was varied between 85% and 115% of the nominal rated supply voltage. The carrier frequency was monitored for any change in amplitude.

Test Results:

This test was not performed because the EUT does not operate on AC power.

8. CONCLUSIONS

The EcoContact Plus, Model: SS6255, as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.

APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

LABORATORY ACCREDITATIONS AND RECOGNITIONS

NVLAP® TESTING NVLAP LAB CODE 200528-0

For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025.
For the most up-to-date version of our scopes and certificates please visit
http://celectronics.com/quality/scope/

Quote from ISO-ILAC-IAF Communiqué on 17025:
"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."

ANSI listing CETCB

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

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).
APEC MRA list NIST MRA site

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

VCCI Support member: Please visit http://www.vcci.jp/vcci_e/

FCC Listing, from FCC OET site
FCC test lab search https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm

Industry Canada Industrie Canada 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

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.

No modifications were made to the EUT during the testing.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

EcoContact Plus
Model: SS6255
S/N: N/A

There are no additional models covered under this report.

APPENDIX D

DIAGRAMS AND CHARTS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

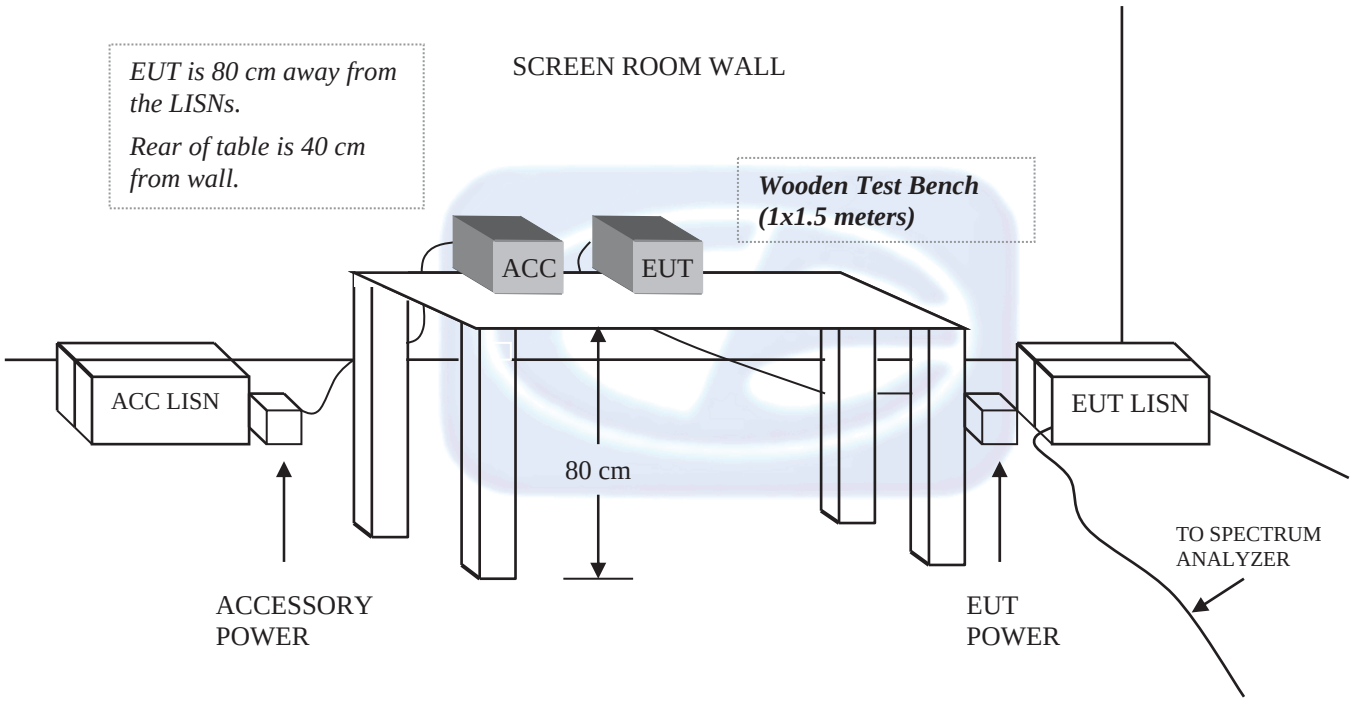
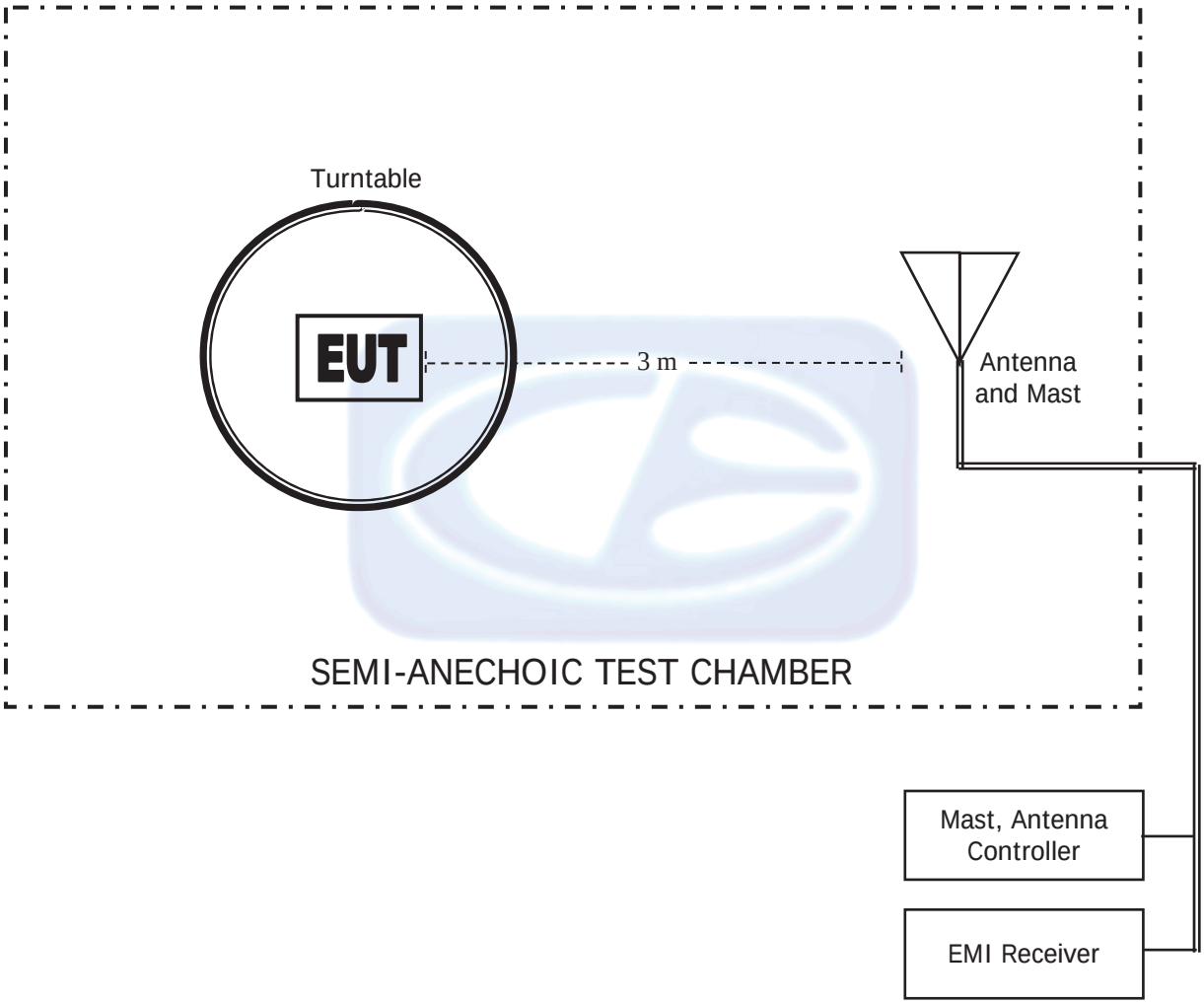


FIGURE 2: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER



COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: FEBRUARY 6, 2015

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-33.18	18.32
0.01	-34.10	17.40
0.02	-38.65	12.85
0.03	-39.28	12.22
0.04	-40.09	11.41
0.05	-40.85	10.65
0.06	-40.88	10.62
0.07	-41.07	10.43
0.08	-41.04	10.46
0.09	-41.19	10.31
0.1	-41.20	10.30
0.2	-41.52	9.98
0.3	-41.53	9.97
0.4	-41.42	10.08
0.5	-41.53	9.97
0.6	-41.53	9.97
0.7	-41.43	10.07
0.8	-41.23	10.27
0.9	-41.13	10.37
1	-41.14	10.36
2	-40.80	10.70
3	-40.66	10.84
4	-40.61	10.89
5	-40.33	11.17
6	-40.53	10.97
7	-40.47	11.03
8	-40.48	11.02
9	-39.93	11.57
10	-39.81	11.69
15	-43.35	8.15
20	-39.16	12.34
25	-40.24	11.26
30	-43.18	8.32

COM-POWER AC-220

COMBILOG ANTENNA

S/N: 61060

CALIBRATION DATE: SEPTEMBER 3, 2015

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	24.00	200	13.00
35	24.30	250	15.30
40	25.40	300	18.20
45	21.50	350	17.90
50	22.50	400	18.60
60	15.40	450	19.80
70	12.70	500	21.60
80	11.10	550	22.40
90	13.40	600	23.70
100	13.80	650	24.30
120	15.40	700	24.00
125	15.40	750	24.50
140	13.10	800	24.30
150	17.20	850	26.30
160	13.20	900	26.90
175	14.20	950	26.00
180	14.30	1000	25.60

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: FEBRUARY 26, 2014

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.23	10.0	38.43
1.5	25.84	10.5	40.19
2.0	28.14	11.0	40.49
2.5	29.51	11.5	41.39
3.0	31.20	12.0	42.02
3.5	32.17	12.5	43.30
4.0	31.40	13.0	42.77
4.5	31.86	13.5	40.18
5.0	34.82	14.0	42.59
5.5	34.38	14.5	41.74
6.0	36.31	15.0	41.84
6.5	34.81	15.5	38.48
7.0	37.48	16.0	39.52
7.5	36.98	16.5	37.85
8.0	36.66	17.0	41.33
8.5	38.47	17.5	44.96
9.0	37.22	18.0	48.50
9.5	37.86		

COM-POWER PAM-118A

PREAMPLIFIER

S/N: 551024

CALIBRATION DATE: MARCH 6, 2015

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	39.76	6.0	38.77
1.1	40.46	6.5	38.46
1.2	40.05	7.0	38.27
1.3	40.58	7.5	38.77
1.4	39.50	8.0	39.25
1.5	39.92	8.5	38.63
1.6	40.40	9.0	39.58
1.7	40.10	9.5	42.12
1.8	40.49	10.0	38.53
1.9	38.86	11.0	40.21
2.0	41.53	12.0	41.15
2.5	41.05	13.0	40.51
3.0	40.29	14.0	40.32
3.5	40.82	15.0	39.47
4.0	40.88	16.0	39.88
4.5	41.37	17.0	39.79
5.0	40.73	18.0	40.61
5.5	39.05		

COM-POWER AH-826

HORN ANTENNA

S/N: 71957

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7

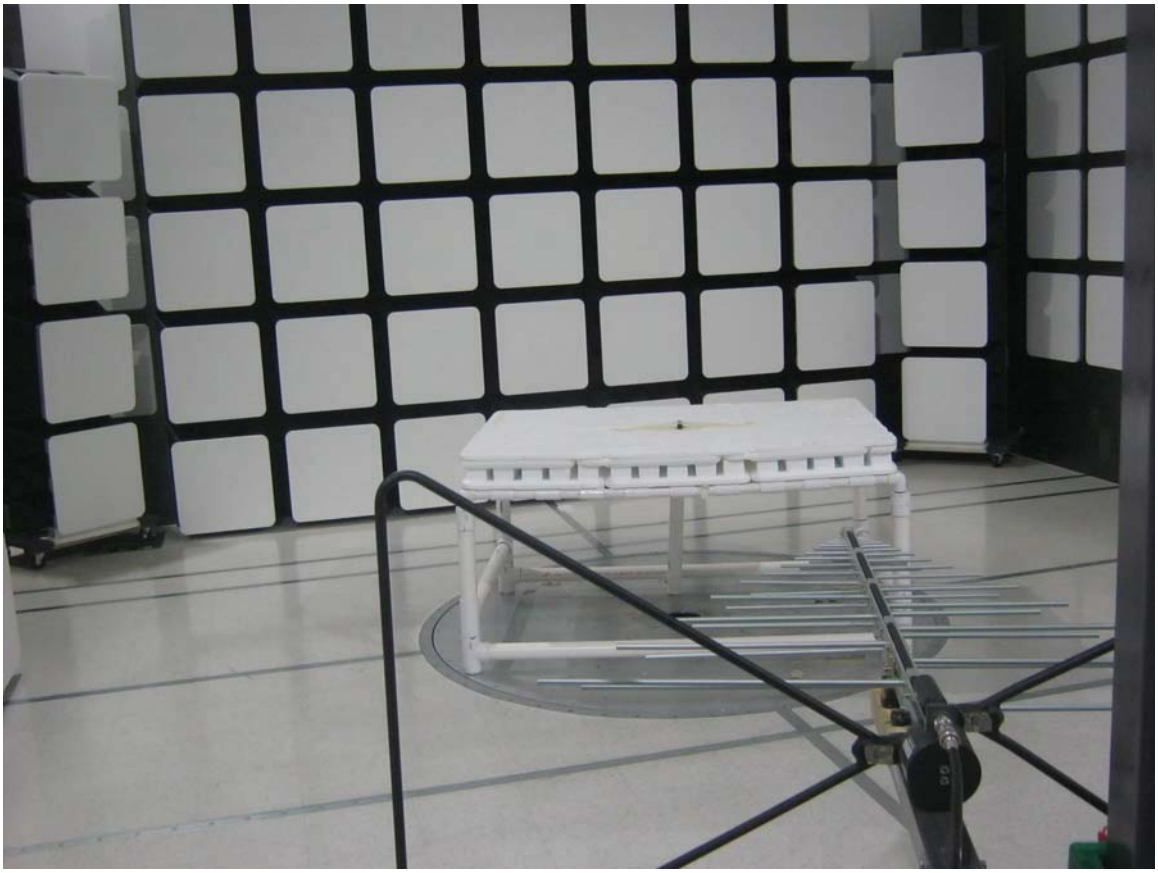
COM-POWER PA-840

MICROWAVE PREAMPLIFIER

S/N: 711013

CALIBRATION DATE: MAY 13, 2014

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	25.19	31.0	25.69
19.0	24.48	31.5	25.74
20.0	24.39	32.0	26.35
21.0	24.73	32.5	26.64
22.0	23.49	33.0	25.98
23.0	24.23	33.5	24.68
24.0	24.59	34.0	24.61
25.0	25.32	34.5	23.78
26.0	25.66	35.0	24.74
26.5	25.99	35.5	24.39
27.0	26.26	36.0	23.46
27.5	25.33	36.5	23.71
28.0	24.49	37.0	26.35
28.5	24.74	37.5	23.49
29.0	25.93	38.0	25.42
29.5	26.28	38.5	24.87
30.0	26.17	39.0	22.60
30.5	26.11	39.5	20.57
		40.0	19.15



FRONT VIEW

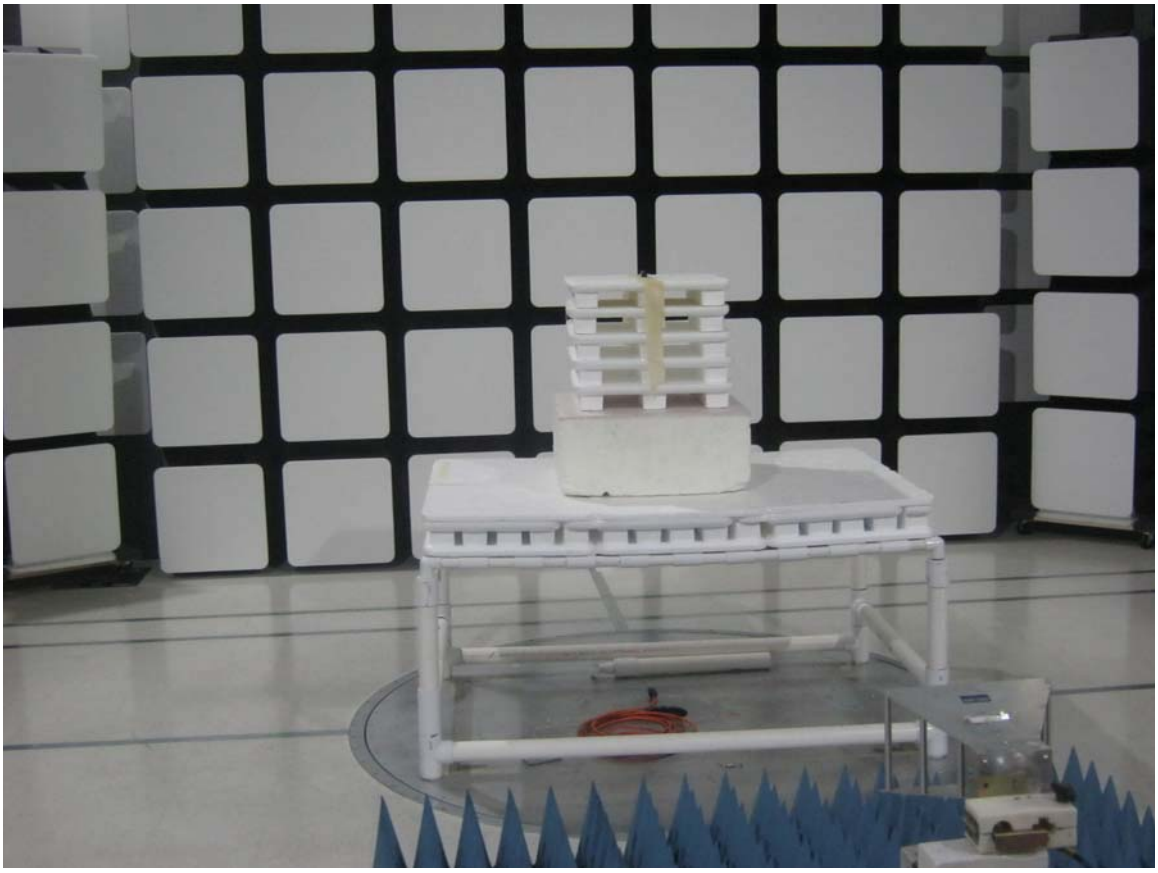
TELKONET, INC.
ECOCONTACT PLUS
MODEL: SS6255
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

TELKONET, INC.
ECOCONTACT PLUS
MODEL: SS6255
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

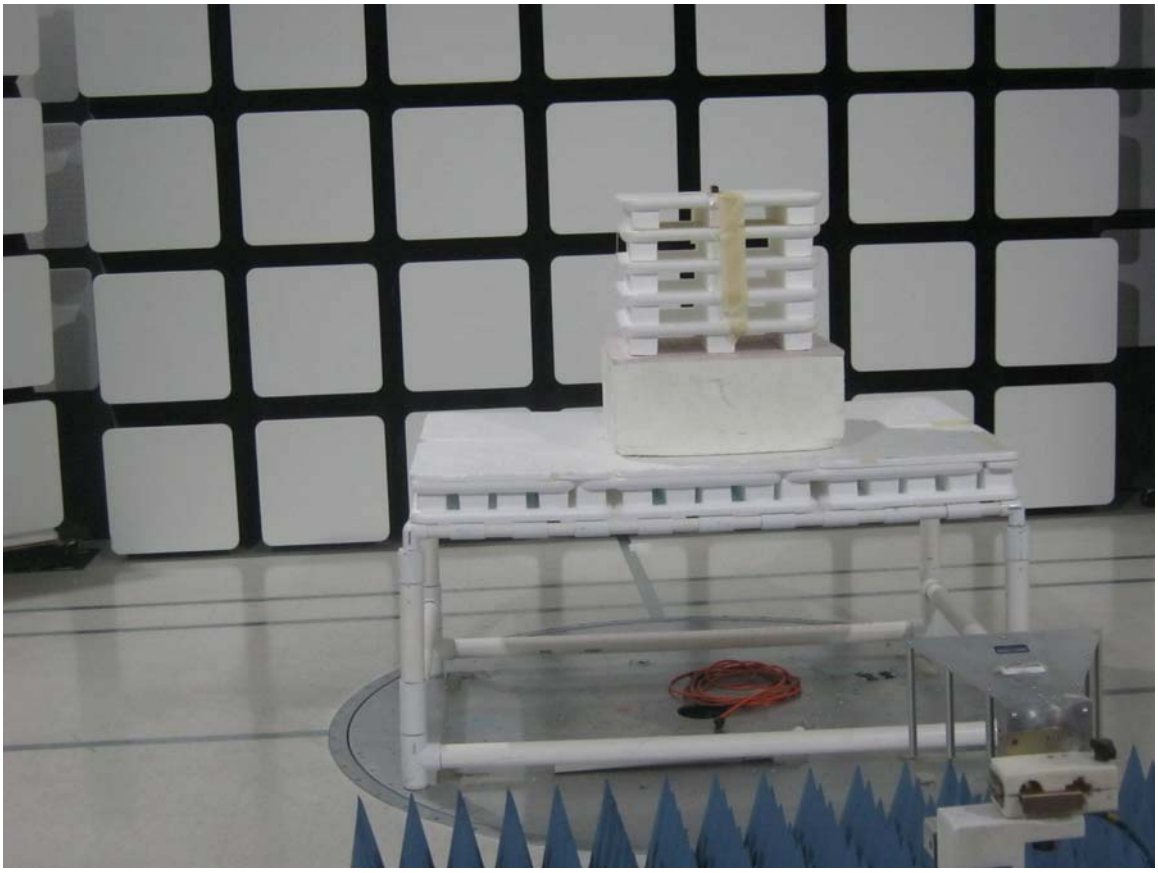
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



FRONT VIEW

TELKONET, INC.
ECOCONTACT PLUS
MODEL: SS6255
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

TELKONET, INC.
ECOCONTACT PLUS
MODEL: SS6255
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS DATA SHEETS

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Fundamental Readings

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2405.00	86.58	H	113.97	-27.39	Peak	252.25	165.91	**Low Channel**
2405.00	66.58	H	93.97	-27.39	Avg	252.25	165.91	**Fundamental - X-Axis**
2405.00	109.23	V	113.97	-4.74	Peak	147.25	142.56	**Low Channel**
2405.00	89.23	V	93.97	-4.74	Avg	147.25	142.56	**Fundamental - X-Axis**
2405.00	105.26	H	113.97	-8.71	Peak	310.25	180.26	**Low Channel**
2405.00	85.26	H	93.97	-8.71	Avg	310.25	180.26	**Fundamental - Y-Axis**
2405.00	106.58	V	113.97	-7.39	Peak	101.25	142.26	**Low Channel**
2405.00	86.58	V	93.97	-7.39	Avg	101.25	142.26	**Fundamental - Y-Axis**
2405.00	107.25	H	113.97	-6.72	Peak	354.25	111.17	**Low Channel**
2405.00	87.25	H	93.97	-6.72	Avg	354.25	111.17	**Fundamental - Z-Axis**
2405.00	109.50	V	113.97	-4.47	Peak	181.75	239.76	**Low Channel**
2405.00	89.50	V	93.97	-4.47	Avg	181.75	239.76	**Fundamental - Z-Axis**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Fundamental Readings

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2440.00	96.19	H	113.97	-17.78	Peak	251.75	182.92	**Middle Channel**
2440.00	76.19	H	93.97	-17.78	Avg	251.75	182.92	**Fundamental - X-Axis**
2440.00	106.55	V	113.97	-7.42	Peak	136.75	111.28	**Middle Channel**
2440.00	86.55	V	93.97	-7.42	Avg	136.75	111.28	**Fundamental - X-Axis**
2440.00	108.86	H	113.97	-5.11	Peak	305.25	182.50	**Middle Channel**
2440.00	88.86	H	93.97	-5.11	Avg	305.25	182.50	**Fundamental - Y-Axis**
2440.00	108.37	V	113.97	-5.60	Peak	97.25	146.32	**Middle Channel**
2440.00	88.37	V	93.97	-5.60	Avg	97.25	146.32	**Fundamental - Y-Axis**
2440.00	106.13	H	113.97	-7.84	Peak	361.33	211.16	**Middle Channel**
2440.00	86.13	H	93.97	-7.84	Avg	361.25	211.16	**Fundamental - Z-Axis**
2440.00	109.22	V	113.97	-4.76	Peak	180.75	182.62	**Middle Channel**
2440.00	89.22	V	93.97	-4.76	Avg	180.75	182.62	**Fundamental - Z-Axis**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Fundamental Readings

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2480.00	97.25	H	113.97	-16.72	Peak	258.75	185.61	**High Channel**
2480.00	77.25	H	93.97	-16.72	Avg	258.75	185.61	**Fundamental - X-Axis**
2480.00	104.53	V	113.97	-9.44	Peak	133.25	158.44	**High Channel**
2480.00	84.53	V	93.97	-9.44	Avg	133.25	158.44	**Fundamental - X-Axis**
2480.00	106.08	H	113.97	-7.89	Peak	308.25	185.56	**High Channel**
2480.00	86.08	H	93.97	-7.89	Avg	308.25	185.56	**Fundamental - Y-Axis**
2480.00	103.29	V	113.97	-10.68	Peak	99.25	142.11	**High Channel**
2480.00	83.29	V	93.97	-10.68	Avg	99.25	142.11	**Fundamental - Y-Axis**
2480.00	106.16	H	113.97	-7.81	Peak	69.01	158.44	**High Channel**
2480.00	86.16	H	93.97	-7.81	Avg	69.01	158.44	**Fundamental - Z-Axis**
2480.00	103.59	V	113.97	-10.38	Peak	102.25	160.45	**High Channel**
2480.00	83.59	V	93.97	-10.38	Avg	102.25	160.45	**Fundamental - Z-Axis**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	52.28	V	73.97	-21.69	Peak	165.25	185.25	
4810.00	32.28	V	53.97	-21.69	Avg	165.25	185.25	
7215.00	47.29	V	73.97	-26.68	Peak	187.75	156.44	
7215.00	27.29	V	53.97	-26.68	Avg	187.75	156.44	
9620.00								**No Emissions**
9620.00								**Detected**
12025.00								**No Emissions**
12025.00								**Detected**
14430.00								**No Emissions**
14430.00								**Detected**
16835.00								**No Emissions**
16835.00								**Detected**
19240.00								**No Emissions**
19240.00								**Detected**
21645.00								**No Emissions**
21645.00								**Detected**
24050.00								**No Emissions**
24050.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	48.59	V	73.97	-25.38	Peak	210.25	152.58	
4810.00	28.59	V	53.97	-25.38	Avg	210.25	152.58	
7215.00	46.58	V	73.97	-27.39	Peak	202.25	163.45	
7215.00	26.58	V	53.97	-27.39	Avg	202.25	163.45	
9620.00								**No Emissions**
9620.00								**Detected**
12025.00								**No Emissions**
12025.00								**Detected**
14430.00								**No Emissions**
14430.00								**Detected**
16835.00								**No Emissions**
16835.00								**Detected**
19240.00								**No Emissions**
19240.00								**Detected**
21645.00								**No Emissions**
21645.00								**Detected**
24050.00								**No Emissions**
24050.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	44.39	V	73.97	-29.58	Peak	172.00	156.38	
4810.00	24.39	V	53.97	-29.58	Avg	172.00	156.38	
7215.00	46.44	V	73.97	-27.53	Peak	161.75	145.35	
7215.00	26.44	V	53.97	-27.53	Avg	161.75	145.35	
9620.00								**No Emissions**
9620.00								**Detected**
12025.00								**No Emissions**
12025.00								**Detected**
14430.00								**No Emissions**
14430.00								**Detected**
16835.00								**No Emissions**
16835.00								**Detected**
19240.00								**No Emissions**
19240.00								**Detected**
21645.00								**No Emissions**
21645.00								**Detected**
24050.00								**No Emissions**
24050.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	45.25	H	73.97	-28.72	Peak	225.25	155.25	
4810.00	25.25	H	53.97	-28.72	Avg	225.50	155.25	
7215.00	47.51	H	73.97	-26.46	Peak	233.25	141.70	
7215.00	27.51	H	53.97	-26.46	Avg	233.25	141.70	
9620.00								**No Emissions**
9620.00								**Detected**
12025.00								**No Emissions**
12025.00								**Detected**
14430.00								**No Emissions**
14430.00								**Detected**
16835.00								**No Emissions**
16835.00								**Detected**
19240.00								**No Emissions**
19240.00								**Detected**
21645.00								**No Emissions**
21645.00								**Detected**
24050.00								**No Emissions**
24050.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	50.02	H	73.97	-23.95	Peak	233.26	141.58	
4810.00	30.02	H	53.97	-23.95	Avg	233.26	141.58	
7215.00	49.25	H	73.97	-24.72	Peak	245.25	165.58	
7215.00	29.25	H	53.97	-24.72	Avg	245.25	165.58	
9620.00								**No Emissions**
9620.00								**Detected**
12025.00								**No Emissions**
12025.00								**Detected**
14430.00								**No Emissions**
14430.00								**Detected**
16835.00								**No Emissions**
16835.00								**Detected**
19240.00								**No Emissions**
19240.00								**Detected**
21645.00								**No Emissions**
21645.00								**Detected**
24050.00								**No Emissions**
24050.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	41.62	H	73.97	-32.35	Peak	161.50	142.71	
4810.00	21.62	H	53.97	-32.35	Avg	161.50	142.71	
7215.00	46.76	H	73.97	-27.21	Peak	35.00	135.07	
7215.00	26.76	H	53.97	-27.21	Avg	35.00	135.07	
9620.00								**No Emissions**
9620.00								**Detected**
12025.00								**No Emissions**
12025.00								**Detected**
14430.00								**No Emissions**
14430.00								**Detected**
16835.00								**No Emissions**
16835.00								**Detected**
19240.00								**No Emissions**
19240.00								**Detected**
21645.00								**No Emissions**
21645.00								**Detected**
24050.00								**No Emissions**
24050.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	42.81	V	73.97	-31.16	Peak	138.25	147.43	
4880.00	22.81	V	53.97	-31.16	Avg	138.25	147.43	
7320.00	47.04	V	73.97	-26.93	Peak	135.25	144.25	
7320.00	27.04	V	53.97	-26.93	Avg	135.25	144.25	
9760.00								**No Emissions**
9760.00								**Detected**
12200.00								**No Emissions**
12200.00								**Detected**
14640.00								**No Emissions**
14640.00								**Detected**
17080.00								**No Emissions**
17080.00								**Detected**
19520.00								**No Emissions**
19520.00								**Detected**
21960.00								**No Emissions**
21960.00								**Detected**
24400.00								**No Emissions**
24400.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	40.60	V	73.97	-33.37	Peak	1.52	153.87	
4880.00	20.60	V	53.97	-33.37	Avg	1.52	153.87	
7320.00	46.46	V	73.97	-27.51	Peak	229.50	141.76	
7320.00	26.46	V	53.97	-27.51	Avg	229.50	141.76	
9760.00								**No Emissions**
9760.00								**Detected**
12200.00								**No Emissions**
12200.00								**Detected**
14640.00								**No Emissions**
14640.00								**Detected**
17080.00								**No Emissions**
17080.00								**Detected**
19520.00								**No Emissions**
19520.00								**Detected**
21960.00								**No Emissions**
21960.00								**Detected**
24400.00								**No Emissions**
24400.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	45.70	V	73.97	-28.27	Peak	107.25	145.82	
4880.00	25.70	V	53.97	-28.27	Avg	107.25	145.82	
7320.00	46.42	V	73.97	-27.55	Peak	32.75	192.26	
7320.00	26.42	V	53.97	-27.55	Avg	32.75	192.26	
9760.00								**No Emissions**
9760.00								**Detected**
12200.00								**No Emissions**
12200.00								**Detected**
14640.00								**No Emissions**
14640.00								**Detected**
17080.00								**No Emissions**
17080.00								**Detected**
19520.00								**No Emissions**
19520.00								**Detected**
21960.00								**No Emissions**
21960.00								**Detected**
24400.00								**No Emissions**
24400.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	44.63	H	73.97	-29.34	Peak	131.75	147.73	
4880.00	24.63	H	53.97	-29.34	Avg	131.75	147.73	
7320.00	46.70	H	73.97	-27.27	Peak	22.00	131.10	
7320.00	26.70	H	53.97	-27.27	Avg	22.00	131.10	
9760.00								**No Emissions**
9760.00								**Detected**
12200.00								**No Emissions**
12200.00								**Detected**
14640.00								**No Emissions**
14640.00								**Detected**
17080.00								**No Emissions**
17080.00								**Detected**
19520.00								**No Emissions**
19520.00								**Detected**
21960.00								**No Emissions**
21960.00								**Detected**
24400.00								**No Emissions**
24400.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	46.65	H	73.97	-27.32	Peak	300.26	176.14	
4880.00	26.65	H	53.97	-27.32	Avg	300.25	176.14	
7320.00	46.32	H	73.97	-27.65	Peak	229.75	178.25	
7320.00	26.32	H	53.97	-27.65	Avg	229.75	178.25	
9760.00								**No Emissions**
9760.00								**Detected**
12200.00								**No Emissions**
12200.00								**Detected**
14640.00								**No Emissions**
14640.00								**Detected**
17080.00								**No Emissions**
17080.00								**Detected**
19520.00								**No Emissions**
19520.00								**Detected**
21960.00								**No Emissions**
21960.00								**Detected**
24400.00								**No Emissions**
24400.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	41.92	H	73.97	-32.05	Peak	190.25	135.55	
4880.00	21.92	H	53.97	-32.05	Avg	190.25	135.55	
7320.00	46.08	H	73.97	-27.89	Peak	73.50	170.29	
7320.00	26.08	H	53.97	-27.89	Avg	73.50	170.29	
9760.00								**No Emissions**
9760.00								**Detected**
12200.00								**No Emissions**
12200.00								**Detected**
14640.00								**No Emissions**
14640.00								**Detected**
17080.00								**No Emissions**
17080.00								**Detected**
19520.00								**No Emissions**
19520.00								**Detected**
21960.00								**No Emissions**
21960.00								**Detected**
24400.00								**No Emissions**
24400.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	46.01	V	73.97	-27.96	Peak	135.50	198.38	
4960.00	26.01	V	53.97	-27.96	Avg	135.50	192.38	
7440.00	46.49	V	73.97	-27.48	Peak	126.25	151.61	
7440.00	26.49	V	53.97	-27.48	Avg	126.25	151.61	
9920.00								**No Emissions**
9920.00								**Detected**
12400.00								**No Emissions**
12400.00								**Detected**
14880.00								**No Emissions**
14880.00								**Detected**
17360.00								**No Emissions**
17360.00								**Detected**
19840.00								**No Emissions**
19840.00								**Detected**
22320.00								**No Emissions**
22320.00								**Detected**
24800.00								**No Emissions**
24800.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	50.39	V	73.97	-23.58	Peak	207.50	138.77	
4960.00	30.39	V	53.97	-23.58	Avg	207.50	138.77	
7440.00	48.20	V	73.97	-25.77	Peak	24.50	161.28	
7440.00	28.20	V	53.97	-25.77	Avg	24.50	161.28	
9920.00								**No Emissions**
9920.00								**Detected**
12400.00								**No Emissions**
12400.00								**Detected**
14880.00								**No Emissions**
14880.00								**Detected**
17360.00								**No Emissions**
17360.00								**Detected**
19840.00								**No Emissions**
19840.00								**Detected**
22320.00								**No Emissions**
22320.00								**Detected**
24800.00								**No Emissions**
24800.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	44.79	V	73.97	-29.18	Peak	115.00	182.47	
4960.00	24.79	V	53.97	-29.18	Avg	115.00	182.47	
7440.00	48.79	V	73.97	-25.18	Peak	309.00	194.23	
7440.00	28.79	V	53.97	-25.18	Avg	309.00	194.23	
9920.00								**No Emissions**
9920.00								**Detected**
12400.00								**No Emissions**
12400.00								**Detected**
14880.00								**No Emissions**
14880.00								**Detected**
17360.00								**No Emissions**
17360.00								**Detected**
19840.00								**No Emissions**
19840.00								**Detected**
22320.00								**No Emissions**
22320.00								**Detected**
24800.00								**No Emissions**
24800.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	48.81	H	73.97	-25.16	Peak	247.25	206.71	
4960.00	28.81	H	53.97	-25.16	Avg	247.25	206.71	
7440.00	47.19	H	73.97	-26.78	Peak	170.00	197.10	
7440.00	27.19	H	53.97	-26.78	Avg	170.00	197.10	
9920.00								**No Emissions**
9920.00								**Detected**
12400.00								**No Emissions**
12400.00								**Detected**
14880.00								**No Emissions**
14880.00								**Detected**
17360.00								**No Emissions**
17360.00								**Detected**
19840.00								**No Emissions**
19840.00								**Detected**
22320.00								**No Emissions**
22320.00								**Detected**
24800.00								**No Emissions**
24800.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	44.64	H	73.97	-29.33	Peak	207.50	227.07	
4960.00	24.64	H	53.97	-29.33	Avg	207.50	227.07	
7440.00	47.22	H	73.97	-26.75	Peak	87.50	235.25	
7440.00	27.22	H	53.97	-26.75	Avg	87.50	235.25	
9920.00								**No Emissions**
9920.00								**Detected**
12400.00								**No Emissions**
12400.00								**Detected**
14880.00								**No Emissions**
14880.00								**Detected**
17360.00								**No Emissions**
17360.00								**Detected**
19840.00								**No Emissions**
19840.00								**Detected**
22320.00								**No Emissions**
22320.00								**Detected**
24800.00								**No Emissions**
24800.00								**Detected**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	47.26	H	73.97	-26.71	Peak	197.00	162.11	
4960.00	27.26	H	53.97	-26.71	Avg	197.00	162.11	
7440.00	50.38	H	73.97	-23.59	Peak	97.50	153.58	
7440.00	30.38	H	53.97	-23.59	Avg	97.50	153.58	
9920.00								**No Emissions**
9920.00								**Detected**
12400.00								**No Emissions**
12400.00								**Detected**
14880.00								**No Emissions**
14880.00								**Detected**
17360.00								**No Emissions**
17360.00								**Detected**
19840.00								**No Emissions**
19840.00								**Detected**
22320.00								**No Emissions**
22320.00								**Detected**
24800.00								**No Emissions**
24800.00								**Detected**

FCC 15.249 and FCC Class B

Telkonet, Inc.
EcoContact Plus
Model: SS6255

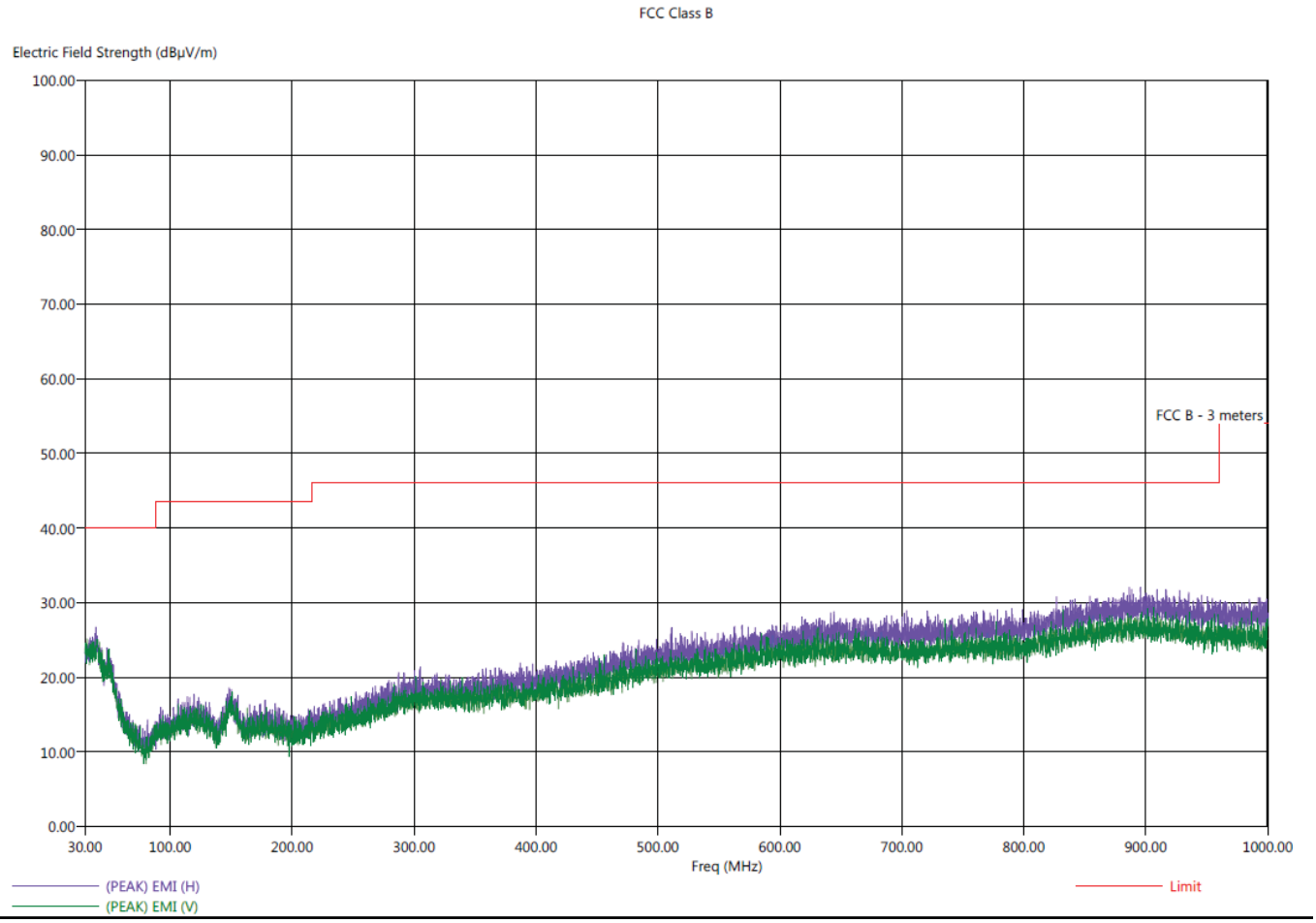
Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Non Harmonic Emissions from the Tx and Digital Portion - 10 kHz to 1 GHz
Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 10 kHz to 1 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 10 kHz to 1 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 25 GHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 25 GHz
								for both Vertical and Horizontal
								Polarizations
								Investigated in the X-Axis, Y-Axis,
								and Z-Axis

Title: Pre-Scan - FCC Class B
File: Pre-Scan - ECT 2 - X-Axis - 30 to 1000 MHz - FCC Class B.set
Operator: Kyle Fujimoto
EUT Type: EcoContact Plus
EUT Condition: Continuously Transmitting at low channel - X-Axis
Comments: Customer: Telkonet, Inc.
Model: SS6255

2/15/2016 2:12:37 PM
Sequence: Preliminary Scan



Title: Radiated Final - 30-1000 MHz -FCC Class B
File: Final Scan - X-Axis - 30 MHz to 1000 MHz - FCC Class B.set
Operator: Kyle Fujimoto
EUT Type: EcoContact Plus
EUT Condition: Continuously Transmitting - Low Channel
X-Axis Worst Case
Comments: Customer: Telkonet, Inc.
Model: SS6255

2/15/2016 2:46:10 PM
Sequence: Final Measurements

FCC Class B - Final Scan

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
31.70	V	35.97	31.15	-4.03	-8.85	40.00	24.11	0.37	193.50	222.53
38.50	H	35.91	32.13	-4.09	-7.87	40.00	25.12	0.42	134.50	126.53
39.00	H	35.92	32.18	-4.08	-7.82	40.00	25.19	0.42	150.25	126.71
41.90	V	34.88	31.11	-5.12	-8.89	40.00	24.04	0.44	300.75	236.80
48.40	H	32.95	29.23	-7.05	-10.77	40.00	22.15	0.49	279.50	142.53
49.50	V	33.83	29.53	-6.17	-10.47	40.00	22.41	0.50	198.50	190.17

BAND EDGES DATA SHEETS

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Band Edges

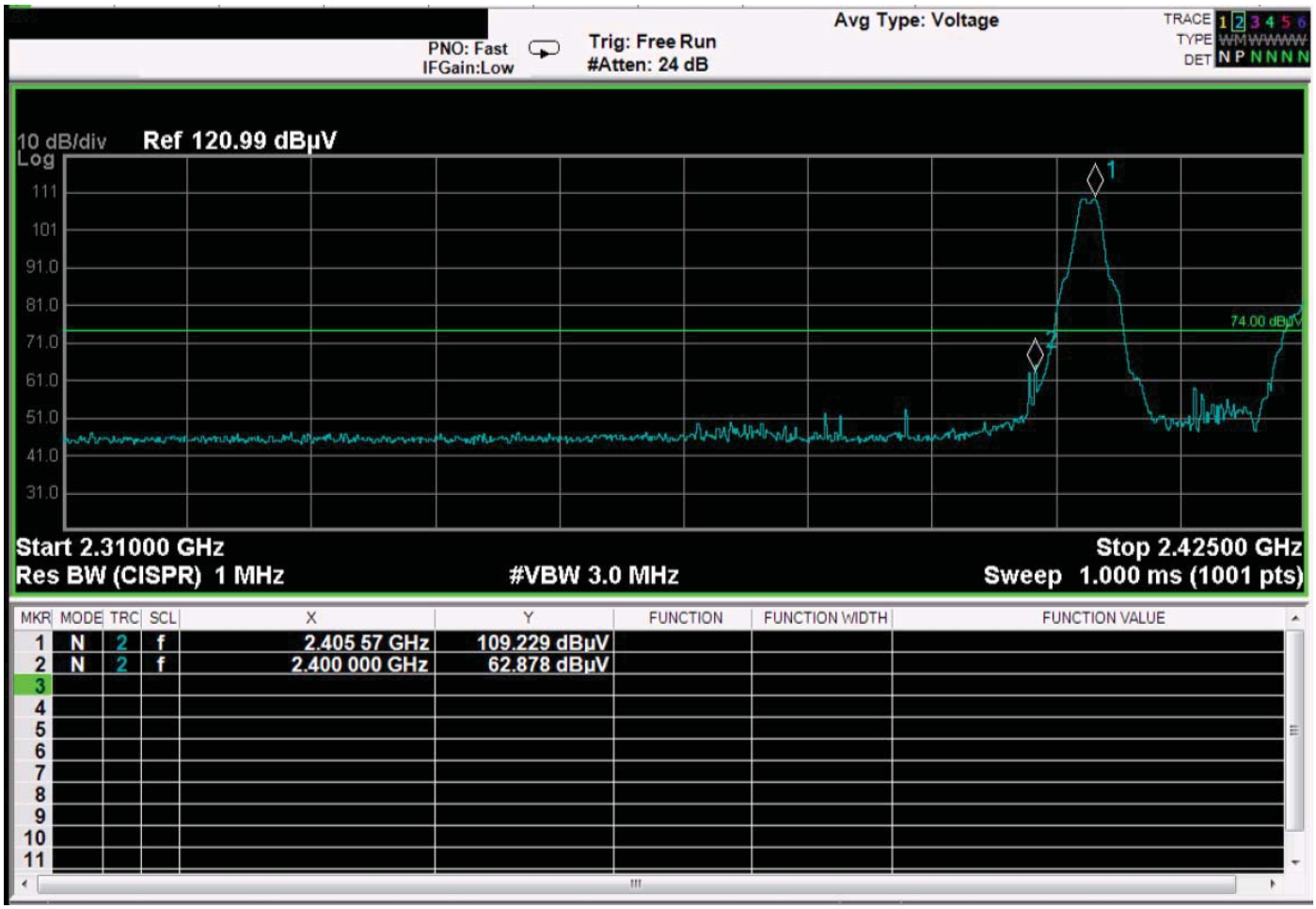
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2405.00	109.23	V	113.97	-4.74	Peak	147.25	142.56	**Fundamental @ 2405 MHz**
2405.00	89.23	V	93.97	-4.74	Avg	147.25	142.56	**X-Axis - Worst Case**
2400.00	62.88	V	73.97	-11.09	Peak	147.25	142.56	**Band Edge**
2400.00	42.88	V	53.97	-11.09	Avg	147.25	142.56	**X-Axis - Worst Case**
2405.00	109.50	H	113.97	-4.47	Peak	181.75	239.76	**Fundamental @ 2405 MHz**
2405.00	89.50	H	93.97	-4.47	Avg	181.75	239.76	**Z-Axis - Worst Case**
2390.00	56.09	H	73.97	-17.88	Peak	181.75	239.76	**Band Edge**
2390.00	36.09	H	53.97	-17.88	Avg	181.75	239.76	**Z-Axis - Worst Case**

FCC 15.249
Telkonet, Inc.
EcoContact Plus
Model: SS6255

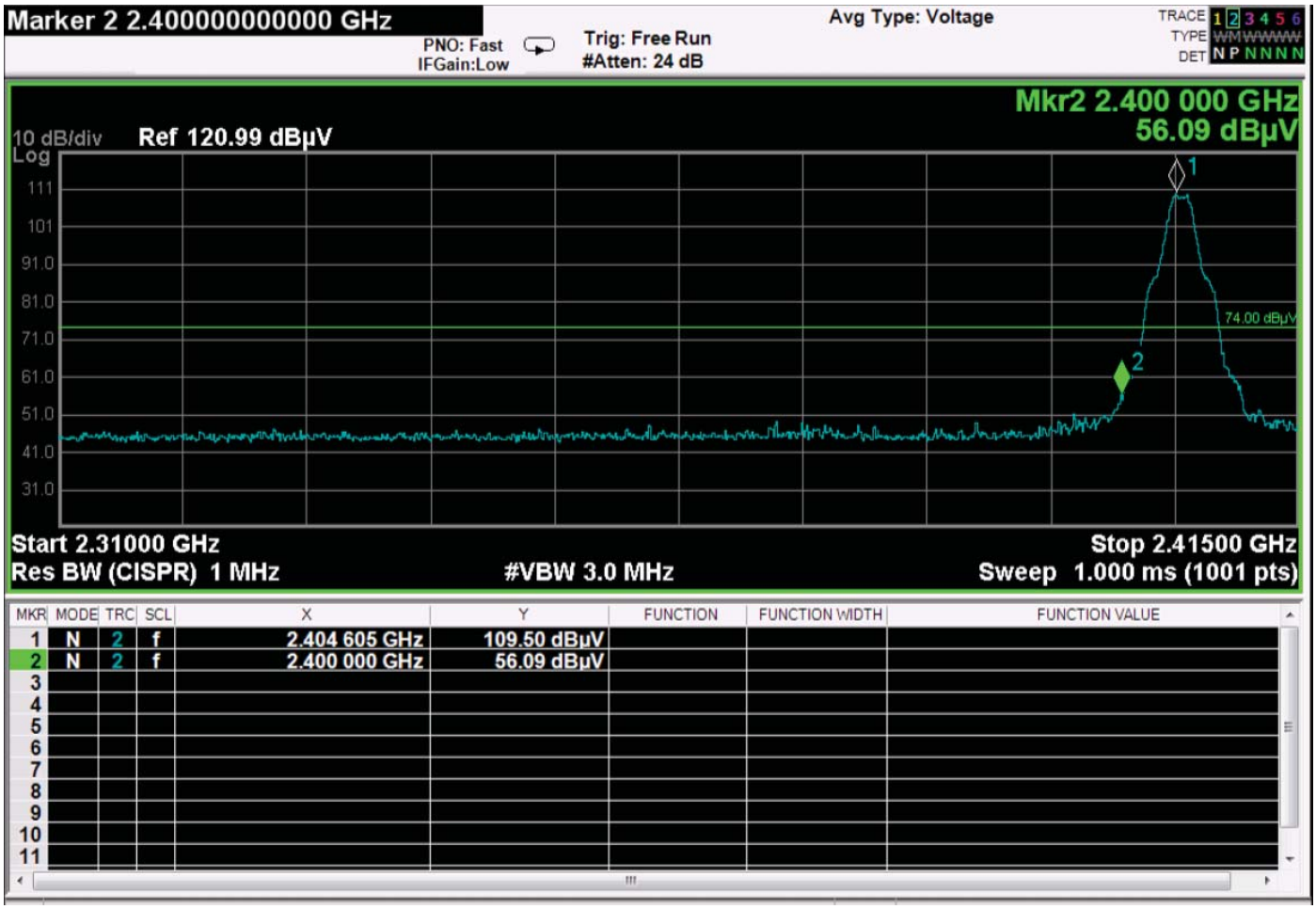
Date: 02/10/2016
Lab: D
Tested By: Kyle Fujimoto

High Channel
Band Edges

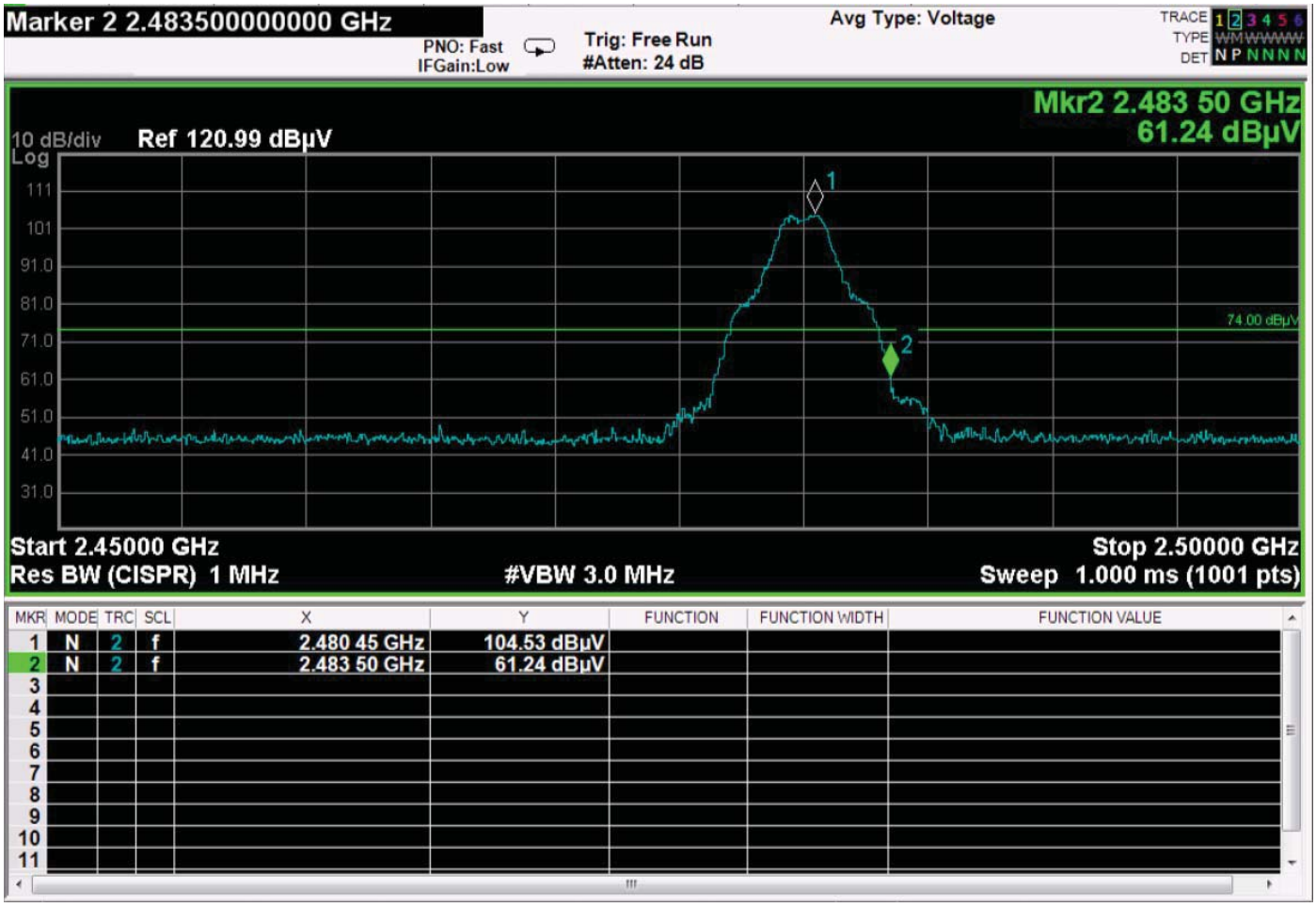
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2480.00	104.53	V	113.97	-9.44	Peak	133.25	158.44	**Fundamental @ 2480 MHz**
2480.00	84.53	V	93.97	-9.44	Avg	133.25	158.44	**X-Axis - Worst Case**
2483.50	61.24	V	73.97	-12.73	Peak	133.25	158.44	**Band Edge**
2483.50	41.24	V	53.97	-12.73	Avg	133.25	158.44	**X-Axis - Worst Case**
2480.00	106.16	H	113.97	-7.81	Peak	69.01	158.44	**Fundamental @ 2480 MHz**
2480.00	86.16	H	93.97	-7.81	Avg	69.01	158.44	**Z-Axis - Worst Case**
2483.50	62.11	H	73.97	-11.86	Peak	69.01	158.44	**Band Edge**
2483.50	42.11	H	53.97	-11.86	Avg	69.01	158.44	**Z-Axis - Worst Case**



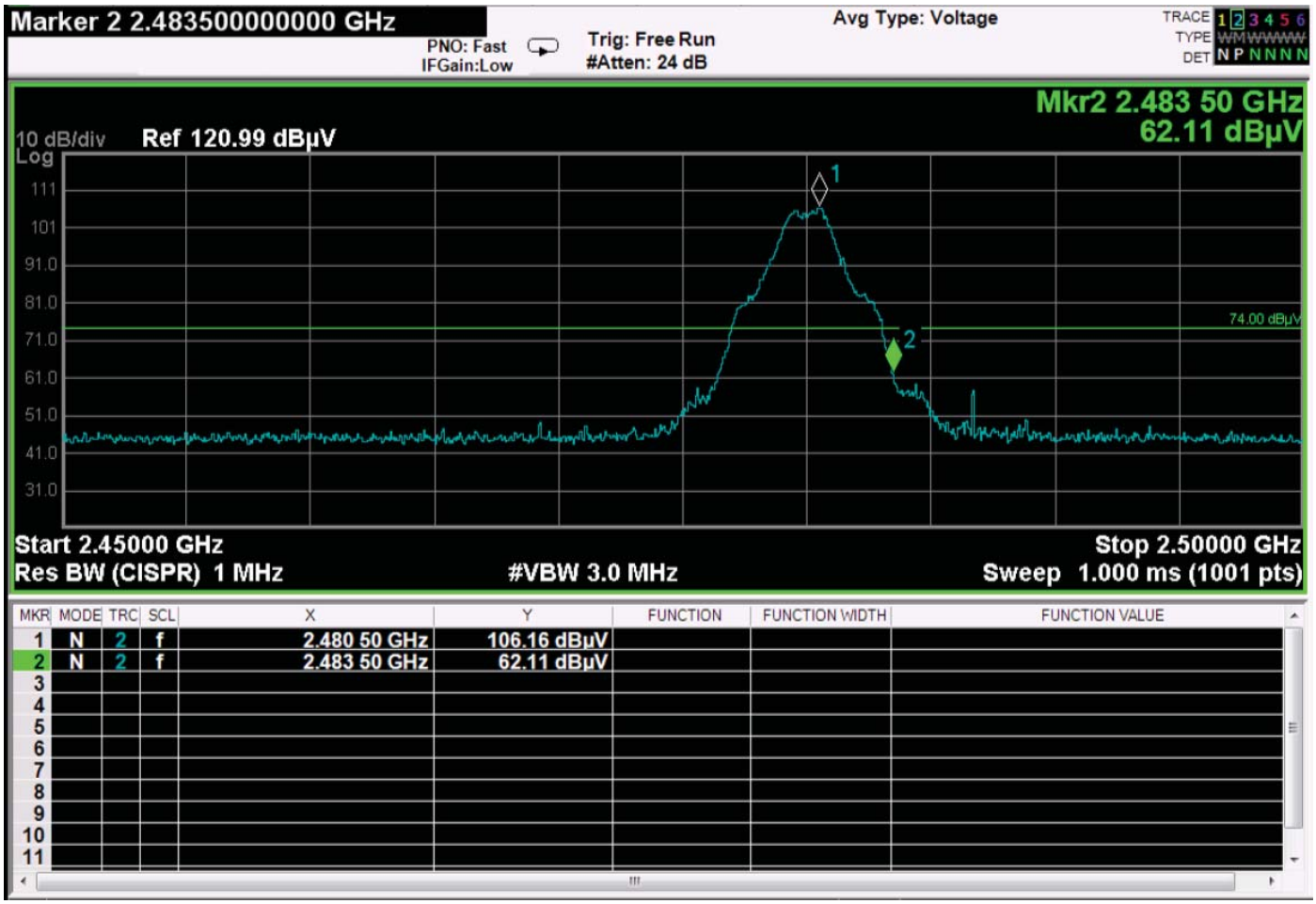
Band Edge – Vertical Polarization – Low Channel – X-Axis Worst Case



Band Edge – Horizontal Polarization – Low Channel – Z-Axis Worst Case

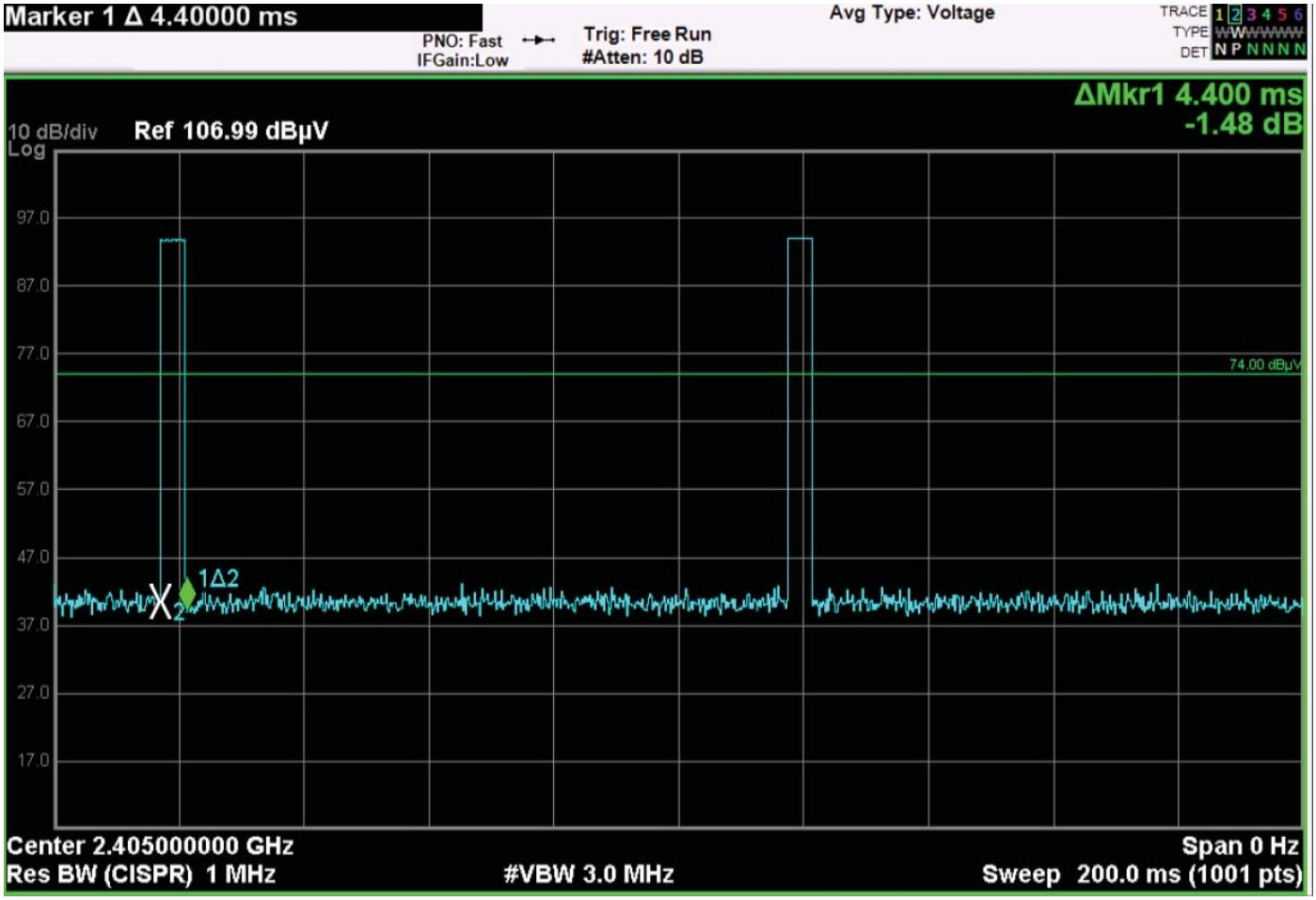


Band Edge – Vertical Polarization – High Channel – X-Axis Worst Case



Band Edge – Horizontal Polarization – High Channel – Z-Axis Worst Case

DUTY CYCLE DATA SHEETS



Time of One Pulse = 4.4 ms

Worst Case Time between Pulses = 100.6 ms

Duty Cycle = 4.4 ms / 100.6 ms = 4.37%

The full -20 dB peak to average ratio can be utilized.