FCC PART 15, SUBPART B and C
TEST REPORT

for

SK METER MODULE

MODEL: SK TX

Prepared for

LEAP DEVICES, LLC
229 EAST RESERVE STREET, #102
VANCOUVER, WASHINGTON 98661-38030

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

JAMES ROSS

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

DATE: MARCH 15, 2014

	REPORT BODY	APPENDICES					TOTAL
		A	***B***	***C***	***D***	***E***	
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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 certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested:	SK Meter Module Model: SK Tx S/N: N/A
Product Description:	See Expository Statement.
Modifications:	The EUT was not modified during the testing.
Customer:	Leap Devices, LLC 229 East Reserve Street, #102 Vancouver, Washington 98661-38030
Test Dates:	March 7 and 8, 2014
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
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 is a DC powered device only.
2	Spurious Radiated RF Emissions, 10 kHz – 1000 MHz	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 15.209
3	Spurious Radiated RF Emissions, 1000 MHz – 9300 MHz	Complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.249

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the SK Meter Module, Model: SK Tx. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. 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, 15.209, 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

Leap Devices, LLC

Kevin King Director

Compatible Electronics Inc.

James Ross Test Engineer
Kyle Fujimoto 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 has not been returned to Leap Devices, LLC. 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
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
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional 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

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - Emissions

The SK Meter Module, Model: SK Tx (EUT) was connected to an Arduino PCB via 10-centimeter cables. The Arduino PCB was also conencted to an AC/DC Adapter via its power port.

The EUT was tested for emissions at the low, middle, and high channels. The channels were changed by changing the jumper settings on the Arduino PCB. The EUT was continuously transmitting.

Note: The AC/DC adapter is to only power the Arduino PCB only. The EUT was powered by the Adurino PCB via its 3.5 Vdc output.

The final radiated data for the EUT as was taken in the mode described above. Please see Appendix E for the data sheets.

4.1.1 Cable Construction and Termination

Cables 1-9 These are 10-centimeter unshielded cables connecting the EUT to the Arduino PCB. The cables are hard wired at each end.

Cable 10 This is a 2-meter unshielded cable connecting the Arduino PCB to the AC/DC Adapter. The cable has a 1/8 inch power connecter at the Arduino end and is hard wired at the AC/DC Adapter end..

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
SK METER MODULE	LEAP DEVICES, LLC	SK Tx	N/A	V4TSKT1
ARDUINO SHIELD PCB	N/A	LEONARDO	N/A	N/A
AC/DC ADAPTER	N/A	SF-789	N/A	N/A

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT					
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
Receiver, 20Hz-40GHz	Rohde & Schwarz	ESIB40	100194	November 19, 2012	2 Year
RF RADIATED EMISSIONS TEST EQUIPMENT					
CombiLog Antenna	Com-Power	AC-220	61060	May 29, 2013	1 Year
Preamplifier	Com-Power	PA-118	181656	January 13, 2014	1 Year
Loop Antenna	Com-Power	AL-130	17089	January 29, 2014	2 Year
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

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 is a DC powered device only.

7.1.2 Radiated Emissions (Spurious and Harmonics) Test – Lab B

The EMI Receiver was used as a measuring meter. A preamplifier was used to increase the sensitivity of the instrument. The Com Power Microwave Preamplifier Model: PA-118 was used for frequencies above 1 GHz. The EMI Receiver was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the EMI Receiver records the highest measured reading over all the sweeps.

The frequencies above 1 GHz were averaged by reducing the VBW down to 10 Hz.

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

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
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.

Radiated Emissions (Spurious and Harmonics) Test -- Lab B (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 from 1 GHz to 9.3 GHz 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 for radiated emissions. Please see Appendix E for the data sheets.

7.1.3 Radiated Emissions (Spurious and Harmonics) Test – Lab D

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 in 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 TDK FAC-3 shielded test chamber of Compatible Electronics, Inc. was used for radiated emissions 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. 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 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 1 GHz	120 kHz	CombiLog Antenna

The EUT was tested at a 3 meter test distance. The six highest emissions are listed in Table 1.0.

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 (d) for radiated emissions. Please see Appendix E for the data sheets.

7.1.4 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
SK Meter Module, Model: SK Tx

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
64.00 (V)	39.55 (QP)	40.00	-0.45
1827.84 (V) (X-Axis)	52.82 (A)	54.00	-1.18
3703.20 (V) (Z-Axis)	52.11 (A)	54.00	-1.89
48.00 (V)	38.05 (QP)	40.00	-1.95
1851.60 (H) (Y-Axis)	51.74 (A)	54.00	-2.26
1807.12 (H) (X-Axis)	51.49 (A)	54.00	-2.51

Notes:
* The complete emissions data is given in Appendix E of this report.
QP Quasi-Peak Reading
A Average Reading

8. CONCLUSIONS

The SK Meter Module, Model: SK Tx 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

LABORATORY ACCREDITATIONS AND RECOGNITIONS

NVLAP LAB CODES 200063-0, 200528-0, 200527-0

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

NVLAP listing links

Agoura Division / **Brea Division** / **Silverado/Lake Forest Division**

.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

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

SK Meter Module
Model: SK Tx
S/N: N/A

There were no additional models covered under this report.

APPENDIX D

DIAGRAMS AND CHARTS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

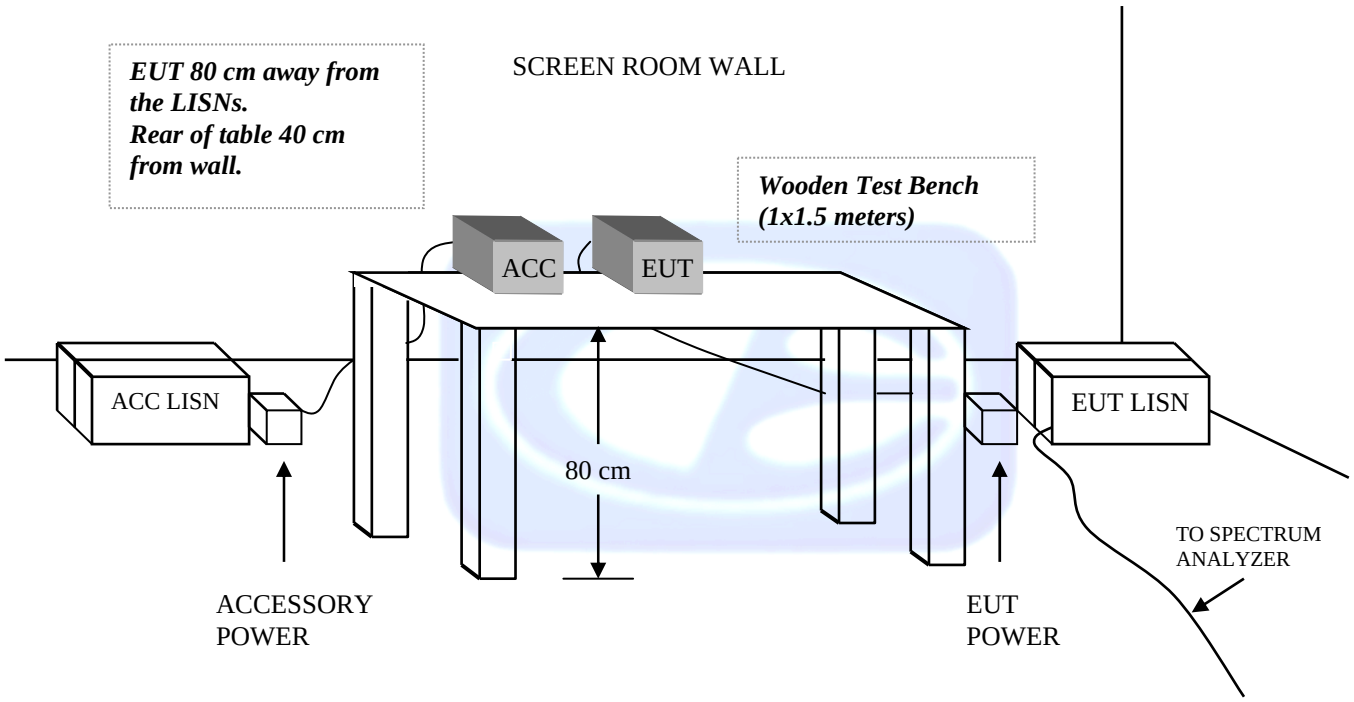


FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE

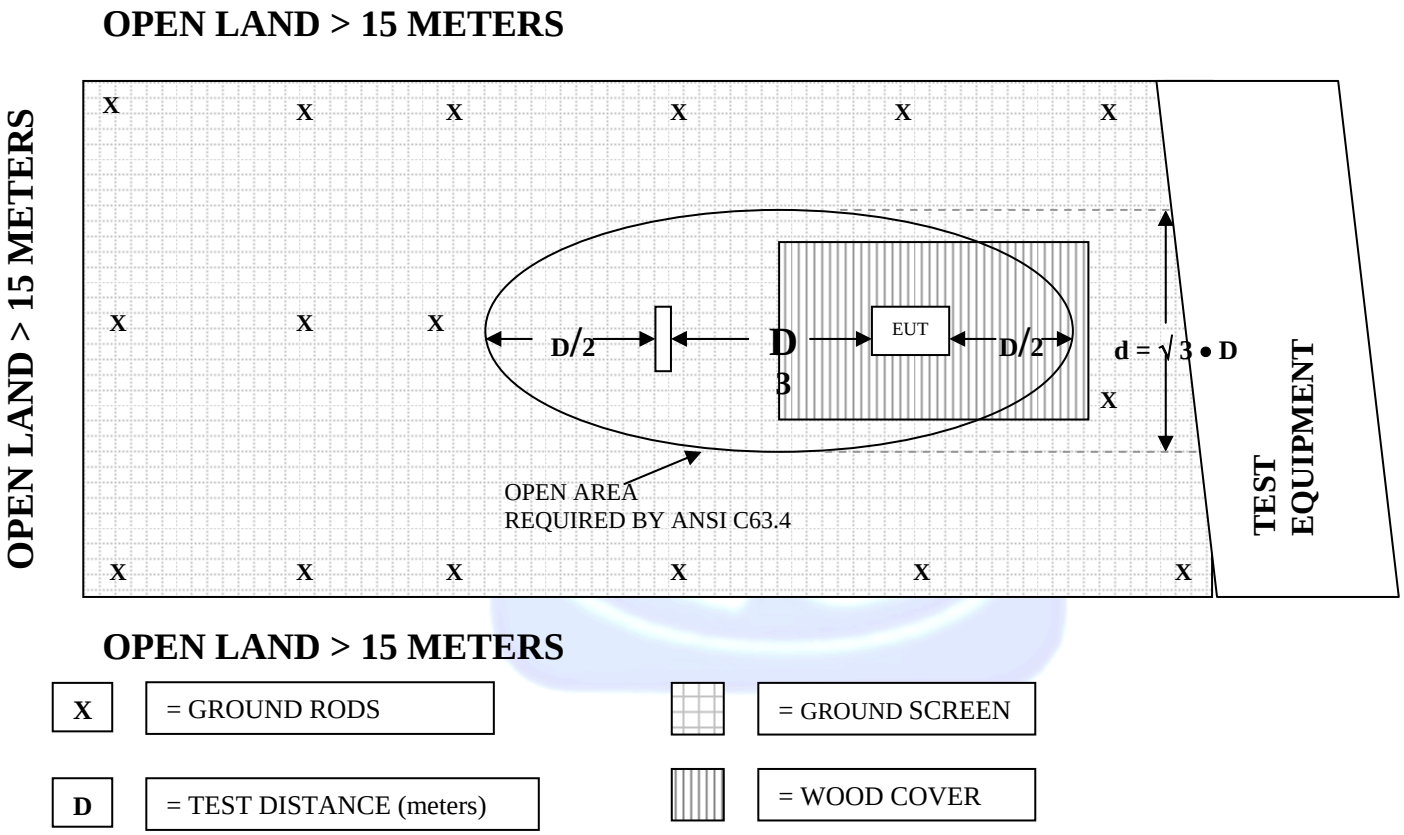
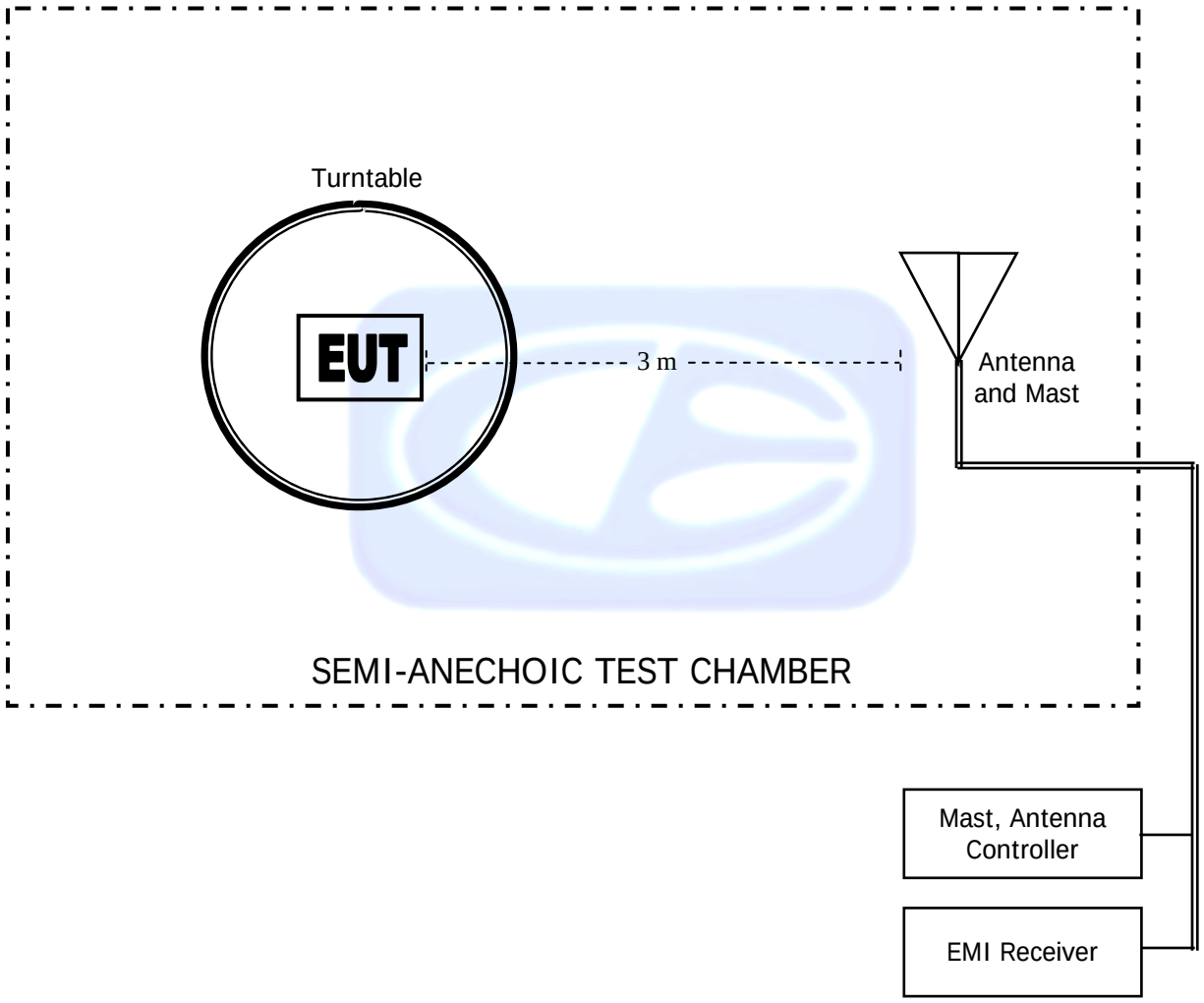


FIGURE 3: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER



COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: JANUARY 29, 2014

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-42.5	9
0.01	-42.3	9.2
0.02	-42.1	9.4
0.03	-41.4	10.1
0.04	-41.8	9.7
0.05	-42.4	9.1
0.06	-42.3	9.2
0.07	-42.5	9
0.08	-42.4	9.1
0.09	-42.5	9
0.1	-42.5	9
0.2	-42.7	8.8
0.3	-42.6	8.9
0.4	-42.5	9
0.5	-42.7	8.8
0.6	-42.7	8.8
0.7	-42.5	9
0.8	-42.3	9.2
0.9	-42.2	9.3
1	-42.2	9.3
2	-41.8	9.7
3	-41.7	9.8
4	-41.7	9.8
5	-41.5	10
6	-41.6	9.9
7	-41.4	10.1
8	-41	10.5
9	-40.8	10.7
10	-41.3	10.2
15	-41.4	10.1
20	-41.2	10.3
25	-42.6	8.9
30	-41.7	9.8

COM-POWER AC-220

COMBILOG ANTENNA

S/N: 61060

CALIBRATION DATE: MAY 29, 2013

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	19.40	200	9.10
35	19.10	250	11.40
40	19.70	300	11.90
45	18.00	350	14.20
50	16.80	400	15.20
60	12.50	450	16.50
70	7.30	500	17.10
80	4.40	550	16.20
90	8.00	600	17.70
100	8.80	650	19.10
120	10.50	700	20.00
125	10.60	750	21.50
140	8.60	800	21.50
150	11.20	850	21.70
160	8.90	900	22.70
175	9.60	950	22.10
180	8.50	1000	22.90

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		

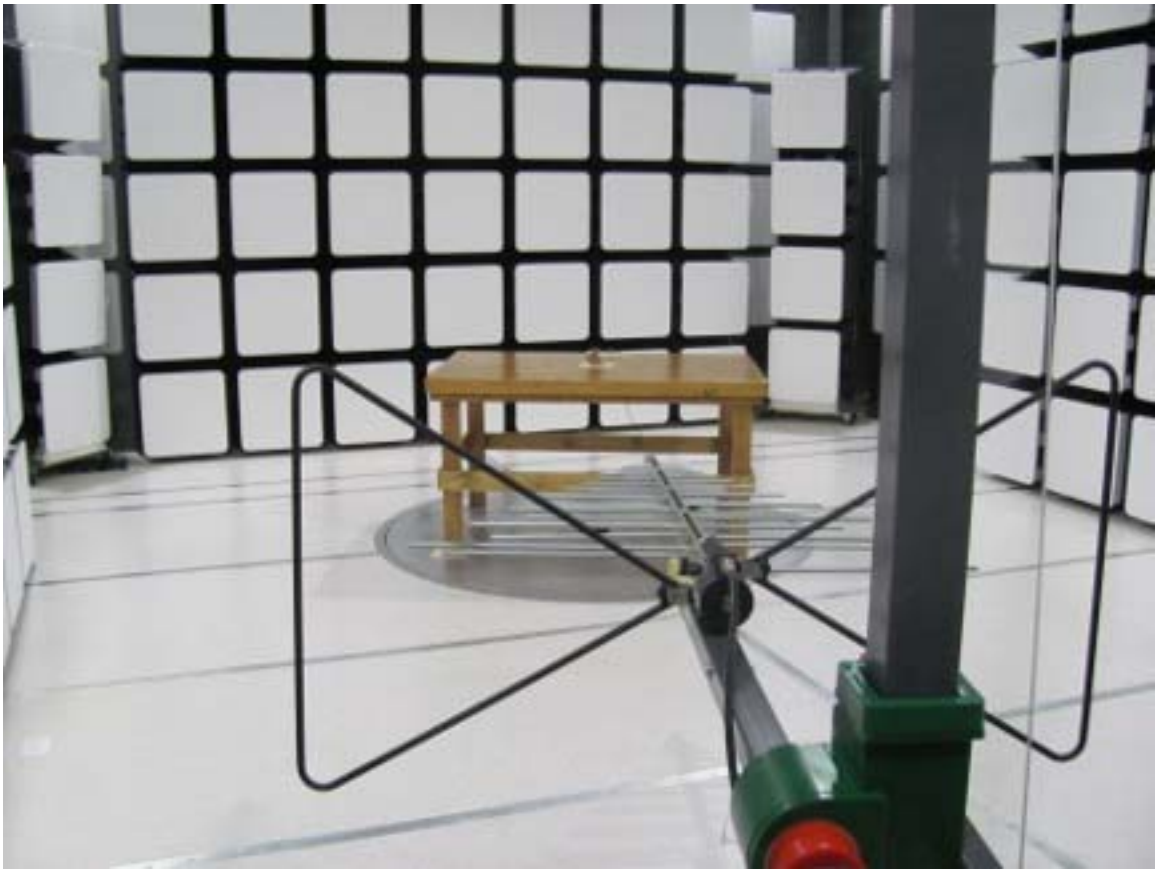
COM-POWER PA-118

PREAMPLIFIER

S/N: 181656

CALIBRATION DATE: JANUARY 13, 2014

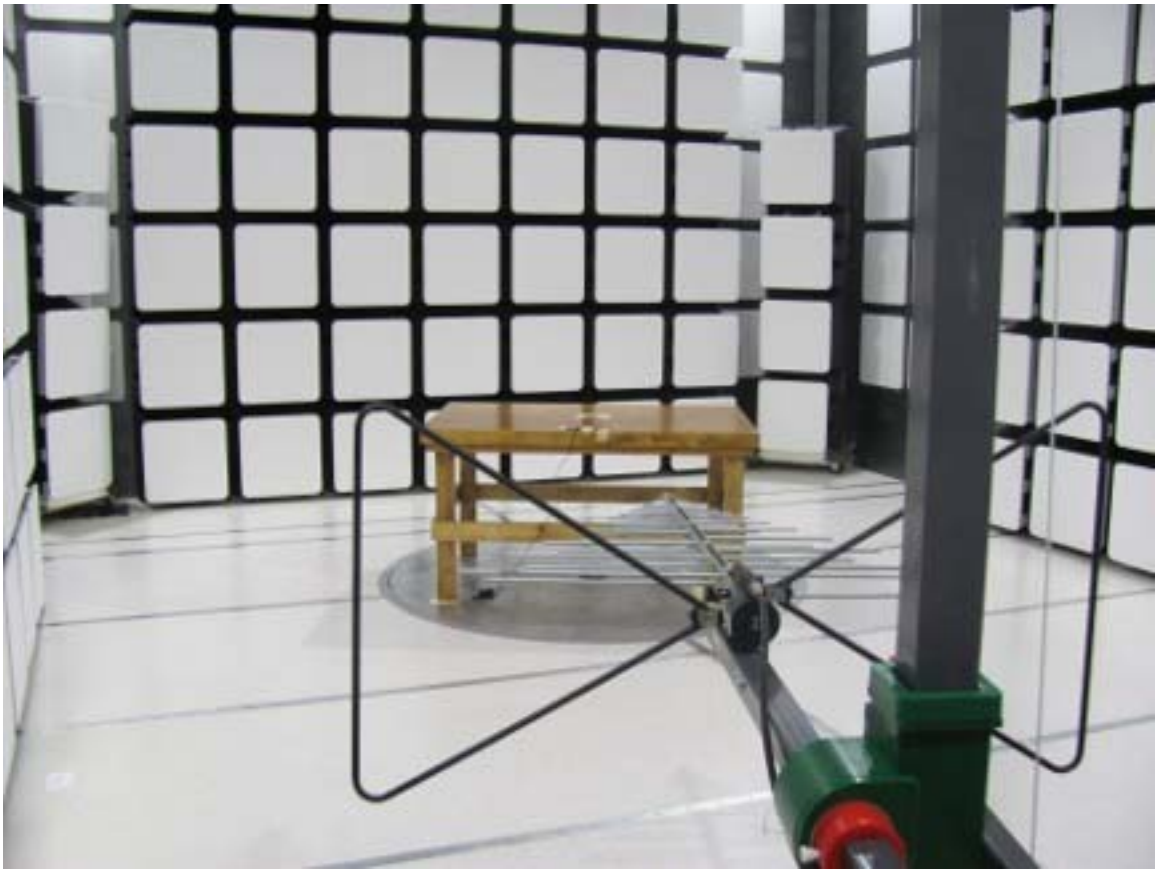
FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.90	6.0	25.40
1.1	25.30	6.5	25.20
1.2	26.00	7.0	24.40
1.3	26.20	7.5	24.00
1.4	26.30	8.0	23.90
1.5	26.40	8.5	24.50
1.6	26.50	9.0	25.20
1.7	26.60	9.5	24.80
1.8	26.50	10.0	24.90
1.9	26.60	11.0	25.40
2.0	26.70	12.0	24.50
2.5	26.90	13.0	24.30
3.0	27.00	14.0	25.20
3.5	27.10	15.0	25.90
4.0	26.60	16.0	25.60
4.5	26.10	17.0	23.70
5.0	26.40	18.0	25.80
5.5	25.80		



FRONT VIEW

LEAP DEVICES, LLC
SK METER MODULE
MODEL: SK Tx
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

LEAP DEVICES, LLC
SK METER MODULE
MODEL: SK Tx
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

FRONT VIEW

LEAP DEVICES, LLC
SK METER MODULE
MODEL: SK Tx
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

LEAP DEVICES, LLC
SK METER MODULE
MODEL: SK Tx
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

Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	83.42	V	94	-10.58	Peak	2.25	85	
1807.12	51.81	V	74	-22.19	Peak	1.5	45	
1807.12	48.31	V	54	-5.69	Avg	1.5	45	
2710.68	38.19	V	74	-35.81	Peak	1.25	180	
2710.68	24.59	V	54	-29.41	Avg	1.25	180	
3614.24	61.31	V	74	-12.69	Peak	1.25	180	
3614.24	50.82	V	54	-3.18	Avg	1.25	180	
4517.80	47.42	V	74	-26.58	Peak	1.35	270	
4517.80	37.97	V	54	-16.03	Avg	1.35	270	
5421.36	54.08	V	74	-19.92	Peak	1.25	180	
5421.36	44.27	V	54	-9.73	Avg	1.25	180	
6324.92	49.25	V	74	-24.75	Peak	1.5	135	
6324.92	35.68	V	54	-18.32	Avg	1.5	135	
7228.48	56.36	V	74	-17.64	Peak	1.25	180	
7228.48	43.91	V	54	-10.09	Avg	1.25	180	
8132.04	53.35	V	74	-20.65	Peak	1.25	135	
8132.04	38.67	V	54	-15.33	Avg	1.25	135	
9035.60	51.74	V	74	-22.26	Peak	1.25	135	
9035.60	38.94	V	54	-15.06	Avg	1.25	135	

FCC 15.249

Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	86.72	H	94	-7.28	Peak	1.53	342	
1807.12	55.06	H	74	-18.94	Peak	1.25	225	
1807.12	51.49	H	54	-2.51	Avg	1.25	225	
2710.68	37.77	H	74	-36.23	Peak	1.25	180	
2710.68	25.24	H	54	-28.76	Avg	1.25	180	
3614.24	59.33	H	74	-14.67	Peak	1.25	180	
3614.24	48.45	H	54	-5.55	Avg	1.25	180	
4517.80	50.14	H	74	-23.86	Peak	1.35	270	
4517.80	39.68	H	54	-14.32	Avg	1.35	270	
5421.36	53.39	H	74	-20.61	Peak	1.25	180	
5421.36	42.71	H	54	-11.29	Avg	1.25	180	
6324.92	49.95	H	74	-24.05	Peak	1.5	135	
6324.92	39.18	H	54	-14.82	Avg	1.5	135	
7228.48	57.73	H	74	-16.27	Peak	1.25	180	
7228.48	46.75	H	54	-7.25	Avg	1.25	180	
8132.04	53.78	H	74	-20.22	Peak	1.25	135	
8132.04	39.61	H	54	-14.39	Avg	1.25	135	
9035.60	49.81	H	74	-24.19	Peak	1.25	135	
9035.60	39.32	H	54	-14.68	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	83.78	V	94	-10.22	Peak	1.67	324	
1807.12	50.32	V	74	-23.68	Peak	1.25	225	
1807.12	46.71	V	54	-7.29	Avg	1.25	225	
2710.68	40.76	V	74	-33.24	Peak	1.25	135	
2710.68	30.76	V	54	-23.24	Avg	1.25	135	
3614.24	57.67	V	74	-16.33	Peak	1.25	180	
3614.24	47.74	V	54	-6.26	Avg	1.25	180	
4517.80	50.34	V	74	-23.66	Peak	1.25	270	
4517.80	40.35	V	54	-13.65	Avg	1.25	270	
5421.36	51.01	V	74	-22.99	Peak	1.25	180	
5421.36	42.57	V	54	-11.43	Avg	1.25	180	
6324.92	55.42	V	74	-18.58	Peak	1.25	225	
6324.92	45.17	V	54	-8.83	Avg	1.25	225	
7228.48	58.78	V	74	-15.22	Peak	1.25	180	
7228.48	46.52	V	54	-7.48	Avg	1.25	180	
8132.04	48.17	V	74	-25.83	Peak	1.25	135	
8132.04	37.74	V	54	-16.26	Avg	1.25	135	
9035.60	49.72	V	74	-24.28	Peak	1.25	135	
9035.60	41.41	V	54	-12.59	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	88.54	H	94	-5.46	Peak	1	331	
1807.12	55.24	H	74	-18.76	Peak	1.25	225	
1807.12	51.26	H	54	-2.74	Avg	1.25	225	
2710.68	37.48	H	74	-36.52	Peak	1.25	180	
2710.68	25.89	H	54	-28.11	Avg	1.25	180	
3614.24	57.53	H	74	-16.47	Peak	1.25	225	
3614.24	47.57	H	54	-6.43	Avg	1.25	225	
4517.80	50.74	H	74	-23.26	Peak	1.35	270	
4517.80	39.66	H	54	-14.34	Avg	1.35	270	
5421.36	55.91	H	74	-18.09	Peak	1.25	180	
5421.36	45.36	H	54	-8.64	Avg	1.25	180	
6324.92	54.07	H	74	-19.93	Peak	1.5	135	
6324.92	42.01	H	54	-11.99	Avg	1.5	135	
7228.48	58.86	H	74	-15.14	Peak	1.25	180	
7228.48	47.46	H	54	-6.54	Avg	1.25	180	
8132.04	52.61	H	74	-21.39	Peak	1.25	135	
8132.04	41.12	H	54	-12.88	Avg	1.25	135	
9035.60	49.96	H	74	-24.04	Peak	1.25	135	
9035.60	39.21	H	54	-14.79	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	86.15	V	94	-7.85	Peak	1	217	
1807.12	48.93	V	74	-25.07	Peak	1.25	225	
1807.12	45.41	V	54	-8.59	Avg	1.25	225	
2710.68	36.53	V	74	-37.47	Peak	1.25	90	
2710.68	26.15	V	54	-27.85	Avg	1.25	90	
3614.24	61.21	V	74	-12.79	Peak	1.25	180	
3614.24	51.41	V	54	-2.59	Avg	1.25	180	
4517.80	50.05	V	74	-23.95	Peak	1.35	270	
4517.80	39.79	V	54	-14.21	Avg	1.35	270	
5421.36	56.02	V	74	-17.98	Peak	1.25	180	
5421.36	46.01	V	54	-7.99	Avg	1.25	180	
6324.92	51.57	V	74	-22.43	Peak	1.5	135	
6324.92	40.59	V	54	-13.41	Avg	1.5	135	
7228.48	57.21	V	74	-16.79	Peak	1.25	180	
7228.48	44.48	V	54	-9.52	Avg	1.25	180	
8132.04	55.71	V	74	-18.29	Peak	1.25	135	
8132.04	42.82	V	54	-11.18	Avg	1.25	135	
9035.60	49.84	V	74	-24.16	Peak	1.25	135	
9035.60	38.28	V	54	-15.72	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Low Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	86.26	H	94	-7.74	Peak	1.66	3	
1807.12	51.61	H	74	-22.39	Peak	1.25	225	
1807.12	46.32	H	54	-7.68	Avg	1.25	225	
2710.68	38.32	H	74	-35.68	Peak	1.25	180	
2710.68	26.76	H	54	-27.24	Avg	1.25	180	
3614.24	59.05	H	74	-14.95	Peak	1.25	180	
3614.24	49.68	H	54	-4.32	Avg	1.25	180	
4517.80	50.12	H	74	-23.88	Peak	1.35	270	
4517.80	39.91	H	54	-14.09	Avg	1.35	270	
5421.36	50.17	H	74	-23.83	Peak	1.25	180	
5421.36	39.45	H	54	-14.55	Avg	1.25	180	
6324.92	50.69	H	74	-23.31	Peak	1.5	135	
6324.92	40.43	H	54	-13.57	Avg	1.5	135	
7228.48	55.11	H	74	-18.89	Peak	1.25	180	
7228.48	43.19	H	54	-10.81	Avg	1.25	180	
8132.04	54.19	H	74	-19.81	Peak	1.25	135	
8132.04	44.14	H	54	-9.86	Avg	1.25	135	
9035.60	50.42	H	74	-23.58	Peak	1.25	135	
9035.60	38.96	H	54	-15.04	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
913.92	84.29	V	94	-9.71	Peak	1.02	215	
1827.84	56.11	V	74	-17.89	Peak	1.25	225	
1827.84	52.82	V	54	-1.18	Avg	1.25	225	
2741.76	36.15	V	74	-37.85	Peak	1.25	180	
2741.76	24.81	V	54	-29.19	Avg	1.25	180	
3655.68	55.48	V	74	-18.52	Peak	1.25	180	
3655.68	45.81	V	54	-8.19	Avg	1.25	180	
4569.60	48.21	V	74	-25.79	Peak	1.35	270	
4569.60	38.21	V	54	-15.79	Avg	1.35	270	
5483.52	51.93	V	74	-22.07	Peak	1.25	180	
5483.52	41.38	V	54	-12.62	Avg	1.25	180	
6397.44	49.16	V	74	-24.84	Peak	1.5	135	
6397.44	34.76	V	54	-19.24	Avg	1.5	135	
7311.36	56.15	V	74	-17.85	Peak	1.25	180	
7311.36	45.55	V	54	-8.45	Avg	1.25	180	
8225.28	52.34	V	74	-21.66	Peak	1.25	135	
8225.28	38.29	V	54	-15.71	Avg	1.25	135	
9139.20	52.39	V	74	-21.61	Peak	1.25	135	
9139.20	39.28	V	54	-14.72	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
913.92	84.01	H	94	-9.99	Peak	1.01	86	
1827.84	56.21	H	74	-17.79	Peak	1.25	225	
1827.84	50.81	H	54	-3.19	Avg	1.25	225	
2741.76	37.01	H	74	-36.99	Peak	1.25	180	
2741.76	26.96	H	54	-27.04	Avg	1.25	180	
3655.68	59.31	H	74	-14.69	Peak	1.25	180	
3655.68	49.15	H	54	-4.85	Avg	1.25	180	
4569.60	49.16	H	74	-24.84	Peak	1.35	270	
4569.60	38.46	H	54	-15.54	Avg	1.35	270	
5483.52	51.28	H	74	-22.72	Peak	1.25	180	
5483.52	41.52	H	54	-12.48	Avg	1.25	180	
6397.44	49.74	H	74	-24.26	Peak	1.5	135	
6397.44	37.29	H	54	-16.71	Avg	1.5	135	
7311.36	53.61	H	74	-20.39	Peak	1.25	180	
7311.36	42.68	H	54	-11.32	Avg	1.25	180	
8225.28	50.77	H	74	-23.23	Peak	1.25	135	
8225.28	38.82	H	54	-15.18	Avg	1.25	135	
9139.20	48.68	H	74	-25.32	Peak	1.25	135	
9139.20	38.88	H	54	-15.12	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
913.92	86.21	V	94	-7.79	Peak	1.58	263	
1827.84	49.55	V	74	-24.45	Peak	1.25	225	
1827.84	44.78	V	54	-9.22	Avg	1.25	225	
2741.76	42.47	V	74	-31.53	Peak	1.25	180	
2741.76	31.86	V	54	-22.14	Avg	1.25	180	
3655.68	55.74	V	74	-18.26	Peak	1.25	180	
3655.68	45.94	V	54	-8.06	Avg	1.25	180	
4569.60	50.91	V	74	-23.09	Peak	1.35	270	
4569.60	40.35	V	54	-13.65	Avg	1.35	270	
5483.52	51.25	V	74	-22.75	Peak	1.25	180	
5483.52	40.54	V	54	-13.46	Avg	1.25	180	
6397.44	53.71	V	74	-20.29	Peak	1.5	135	
6397.44	43.49	V	54	-10.51	Avg	1.5	135	
7311.36	55.68	V	74	-18.32	Peak	1.25	180	
7311.36	44.83	V	54	-9.17	Avg	1.25	180	
8225.28	53.23	V	74	-20.77	Peak	1.25	135	
8225.28	41.13	V	54	-12.87	Avg	1.25	135	
9139.20	51.54	V	74	-22.46	Peak	1.25	135	
9139.20	38.85	V	54	-15.15	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
913.92	86.62	H	94	-7.38	Peak	1.57	354	
1827.84	55.22	H	74	-18.78	Peak	1.25	225	
1827.84	51.02	H	54	-2.98	Avg	1.25	225	
2741.76	35.53	H	74	-38.47	Peak	1.25	180	
2741.76	25.74	H	54	-28.26	Avg	1.25	180	
3655.68	58.37	H	74	-15.63	Peak	1.25	180	
3655.68	48.85	H	54	-5.15	Avg	1.25	180	
4569.60	50.66	H	74	-23.34	Peak	1.35	270	
4569.60	39.91	H	54	-14.09	Avg	1.35	270	
5483.52	54.67	H	74	-19.33	Peak	1.25	180	
5483.52	43.89	H	54	-10.11	Avg	1.25	180	
6397.44	53.19	H	74	-20.81	Peak	1.5	135	
6397.44	42.05	H	54	-11.95	Avg	1.5	135	
7311.36	56.22	H	74	-17.78	Peak	1.25	180	
7311.36	45.31	H	54	-8.69	Avg	1.25	180	
8225.28	47.93	H	74	-26.07	Peak	1.25	135	
8225.28	37.99	H	54	-16.01	Avg	1.25	135	
9139.20	53.53	H	74	-20.47	Peak	1.25	135	
9139.20	38.74	H	54	-15.26	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
913.92	84.94	V	94	-9.06	Peak	1	215	
1827.84	49.14	V	74	-24.86	Peak	1.25	225	
1827.84	42.92	V	54	-11.08	Avg	1.25	225	
2741.76	42.61	V	74	-31.39	Peak	1.25	180	
2741.76	30.29	V	54	-23.71	Avg	1.25	180	
3655.68	62.02	V	74	-11.98	Peak	1.25	180	
3655.68	50.89	V	54	-3.11	Avg	1.25	180	
4569.60	52.91	V	74	-21.09	Peak	1.35	270	
4569.60	43.37	V	54	-10.63	Avg	1.35	270	
5483.52	57.77	V	74	-16.23	Peak	1.25	180	
5483.52	48.53	V	54	-5.47	Avg	1.25	180	
6397.44	50.46	V	74	-23.54	Peak	1.5	135	
6397.44	39.16	V	54	-14.84	Avg	1.5	135	
7311.36	55.51	V	74	-18.49	Peak	1.25	180	
7311.36	44.66	V	54	-9.34	Avg	1.25	180	
8225.28	53.15	V	74	-20.85	Peak	1.25	135	
8225.28	41.67	V	54	-12.33	Avg	1.25	135	
9139.20	50.43	V	74	-23.57	Peak	1.25	135	
9139.20	39.17	V	54	-14.83	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Middle Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
913.92	86.16	H	94	-7.84	Peak	1.51	345	
1827.84	50.75	H	74	-23.25	Peak	1.25	225	
1827.84	46.78	H	54	-7.22	Avg	1.25	225	
2741.76	40.41	H	74	-33.59	Peak	1.25	180	
2741.76	28.08	H	54	-25.92	Avg	1.25	180	
3655.68	59.08	H	74	-14.92	Peak	1.25	180	
3655.68	48.97	H	54	-5.03	Avg	1.25	180	
4569.60	51.13	H	74	-22.87	Peak	1.35	270	
4569.60	40.61	H	54	-13.39	Avg	1.35	270	
5483.52	51.61	H	74	-22.39	Peak	1.25	180	
5483.52	40.45	H	54	-13.55	Avg	1.25	180	
6397.44	50.62	H	74	-23.38	Peak	1.5	135	
6397.44	39.12	H	54	-14.88	Avg	1.5	135	
7311.36	52.19	H	74	-21.81	Peak	1.25	180	
7311.36	41.71	H	54	-12.29	Avg	1.25	180	
8225.28	51.77	H	74	-22.23	Peak	1.25	135	
8225.28	38.82	H	54	-15.18	Avg	1.25	135	
9139.20	50.73	H	74	-23.27	Peak	1.25	135	
9139.20	39.09	H	54	-14.91	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

High Channel
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
925.80	83.72	V	94	-10.28	Peak	1.56	252	
1851.60	47.82	V	74	-26.18	Peak	1.25	225	
1851.60	43.52	V	54	-10.48	Avg	1.25	225	
2777.40	37.96	V	74	-36.04	Peak	1.25	180	
2777.40	25.95	V	54	-28.05	Avg	1.25	180	
3703.20	60.53	V	74	-13.47	Peak	1.25	135	
3703.20	50.26	V	54	-3.74	Avg	1.25	135	
4629.00	46.71	V	74	-27.29	Peak	1.25	225	
4629.00	33.94	V	54	-20.06	Avg	1.25	225	
5554.80	52.42	V	74	-21.58	Peak	1.25	180	
5554.80	41.03	V	54	-12.97	Avg	1.25	180	
6480.60	47.76	V	74	-26.24	Peak	1.5	135	
6480.60	33.46	V	54	-20.54	Avg	1.5	135	
7406.40	53.64	V	74	-20.36	Peak	1.25	180	
7406.40	42.77	V	54	-11.23	Avg	1.25	180	
8332.20	51.01	V	74	-22.99	Peak	1.25	135	
8332.20	37.01	V	54	-16.99	Avg	1.25	135	
9258.00	50.95	V	74	-23.05	Peak	1.25	135	
9258.00	38.94	V	54	-15.06	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

High Channel
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
925.80	84.09	H	94	-9.91	Peak	1	77	
1851.60	48.86	H	74	-25.14	Peak	1.25	225	
1851.60	41.94	H	54	-12.06	Avg	1.25	225	
2777.40	38.36	H	74	-35.64	Peak	1.25	180	
2777.40	26.22	H	54	-27.78	Avg	1.25	180	
3703.20	58.84	H	74	-15.16	Peak	1.25	135	
3703.20	48.49	H	54	-5.51	Avg	1.25	135	
4629.00	49.42	H	74	-24.58	Peak	1.25	225	
4629.00	37.51	H	54	-16.49	Avg	1.25	225	
5554.80	53.75	H	74	-20.25	Peak	1.25	180	
5554.80	41.53	H	54	-12.47	Avg	1.25	180	
6480.60	46.23	H	74	-27.77	Peak	1.5	135	
6480.60	35.08	H	54	-18.92	Avg	1.5	135	
7406.40	55.36	H	74	-18.64	Peak	1.25	180	
7406.40	44.24	H	54	-9.76	Avg	1.25	180	
8332.20	49.92	H	74	-24.08	Peak	1.25	135	
8332.20	38.11	H	54	-15.89	Avg	1.25	135	
9258.00	50.96	H	74	-23.04	Peak	1.25	135	
9258.00	38.99	H	54	-15.01	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

High Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
925.80	84.13	V	94	-9.87	Peak	1	262	
1851.60	46.01	V	74	-27.99	Peak	1.25	225	
1851.60	42.09	V	54	-11.91	Avg	1.25	225	
2777.40	41.39	V	74	-32.61	Peak	1.25	180	
2777.40	30.13	V	54	-23.87	Avg	1.25	180	
3703.20	56.56	V	74	-17.44	Peak	1.25	180	
3703.20	46.98	V	54	-7.02	Avg	1.25	180	
4629.00	52.32	V	74	-21.68	Peak	1.35	270	
4629.00	41.94	V	54	-12.06	Avg	1.35	270	
5554.80	55.11	V	74	-18.89	Peak	1.25	180	
5554.80	45.87	V	54	-8.13	Avg	1.25	180	
6480.60	52.86	V	74	-21.14	Peak	1.5	135	
6480.60	43.44	V	54	-10.56	Avg	1.5	135	
7406.40	54.09	V	74	-19.91	Peak	1.25	180	
7406.40	42.53	V	54	-11.47	Avg	1.25	180	
8332.20	55.55	V	74	-18.45	Peak	1.25	135	
8332.20	43.84	V	54	-10.16	Avg	1.25	135	
9258.00	49.49	V	74	-24.51	Peak	1.25	135	
9258.00	39.39	V	54	-14.61	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

High Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
925.80	85.13	H	94	-8.87	Peak	1.16	184	
1851.60	55.28	H	74	-18.72	Peak	1.25	225	
1851.60	51.74	H	54	-2.26	Avg	1.25	225	
2777.40	37.98	H	74	-36.02	Peak	1.25	180	
2777.40	26.33	H	54	-27.67	Avg	1.25	180	
3703.20	58.01	H	74	-15.99	Peak	1.25	135	
3703.20	48.81	H	54	-5.19	Avg	1.25	135	
4629.00	49.23	H	74	-24.77	Peak	1.25	225	
4629.00	39.35	H	54	-14.65	Avg	1.25	225	
5554.80	55.51	H	74	-18.49	Peak	1.25	180	
5554.80	45.01	H	54	-8.99	Avg	1.25	180	
6480.60	53.15	H	74	-20.85	Peak	1.5	135	
6480.60	41.22	H	54	-12.78	Avg	1.5	135	
7406.40	54.98	H	74	-19.02	Peak	1.25	180	
7406.40	43.67	H	54	-10.33	Avg	1.25	180	
8332.20	54.85	H	74	-19.15	Peak	1.25	135	
8332.20	44.62	H	54	-9.38	Avg	1.25	135	
9258.00	50.21	H	74	-23.79	Peak	1.25	135	
9258.00	39.41	H	54	-14.59	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

High Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
925.80	84.59	V	94	-9.41	Peak	1.55	251	
1851.60	45.82	V	74	-28.18	Peak	1.25	225	
1851.60	41.77	V	54	-12.23	Avg	1.25	225	
2777.40	34.21	V	74	-39.79	Peak	1.25	180	
2777.40	24.39	V	54	-29.61	Avg	1.25	180	
3703.20	62.63	V	74	-11.37	Peak	1.25	135	
3703.20	52.11	V	54	-1.89	Avg	1.25	135	
4629.00	47.26	V	74	-26.74	Peak	1.25	225	
4629.00	36.65	V	54	-17.35	Avg	1.25	225	
5554.80	57.47	V	74	-16.53	Peak	1.25	180	
5554.80	46.91	V	54	-7.09	Avg	1.25	180	
6480.60	49.169	V	74	-24.831	Peak	1.5	135	
6480.60	36.46	V	54	-17.54	Avg	1.5	135	
7406.40	55.99	V	74	-18.01	Peak	1.25	180	
7406.40	46.28	V	54	-7.72	Avg	1.25	180	
8332.20	50.65	V	74	-23.35	Peak	1.25	135	
8332.20	38.46	V	54	-15.54	Avg	1.25	135	
9258.00	51.68	V	74	-22.32	Peak	1.25	135	
9258.00	39.61	V	54	-14.39	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

High Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
925.80	84.59	H	94	-9.41	Peak	1.55	352	
1851.60	50.33	H	74	-23.67	Peak	1.25	225	
1851.60	46.01	H	54	-7.99	Avg	1.25	225	
2777.40	39.58	H	74	-34.42	Peak	1.25	180	
2777.40	26.73	H	54	-27.27	Avg	1.25	180	
3703.20	59.04	H	74	-14.96	Peak	1.25	135	
3703.20	47.41	H	54	-6.59	Avg	1.25	135	
4629.00	49.56	H	74	-24.44	Peak	1.25	225	
4629.00	39.11	H	54	-14.89	Avg	1.25	225	
5554.80	53.15	H	74	-20.85	Peak	1.25	180	
5554.80	42.41	H	54	-11.59	Avg	1.25	180	
6480.60	52.59	H	74	-21.41	Peak	1.5	135	
6480.60	41.93	H	54	-12.07	Avg	1.5	135	
7406.40	50.28	H	74	-23.72	Peak	1.25	180	
7406.40	39.81	H	54	-14.19	Avg	1.25	180	
8332.20	48.38	H	74	-25.62	Peak	1.25	135	
8332.20	40.63	H	54	-13.37	Avg	1.25	135	
9258.00	53.65	H	74	-20.35	Peak	1.25	135	
9258.00	41.89	H	54	-12.11	Avg	1.25	135	

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Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Non-Harmonic Emissions from the Tx and Digital Portion
Vertical and Horizontal Polarizations

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Detected from
								the Digital Portion of the EUT
								from 1 GHz to 9.3 GHz
								No Emissions Detected from
								the Non-Harmonic Emissions
								from the Tx from
								1 GHz to 9.3 GHz
								No Emissions Detected from
								the Digital Portion of the EUT
								from 10 kHz to 30 MHz
								No Emissions Detected from
								the Non-Harmonic Emissions
								from the Tx from
								10 kHz to 30 MHz
								Tested in the X-Axis,
								Y-Axis, and Z-Axis

```
Leap Devices, LLC - Pre-Scan - FCC Class B                          3/8/2014 6:00:32 PM
File: Radiated Pre-Scan 30-1000Mhz - FCC B - Y-Axis Worst Case 03-08-2014.set   Sequence: Preliminary Scan
Operator: Kyle Fujimoto
EUT Type: SK Meter Module
EUT Condition: Everything Connected and Operating Normally
Note #1: The emission in the 902 MHz to 928 MHz band is from the transmitter and was tested to FCC 15.249 limits.
M/N: SK Tx
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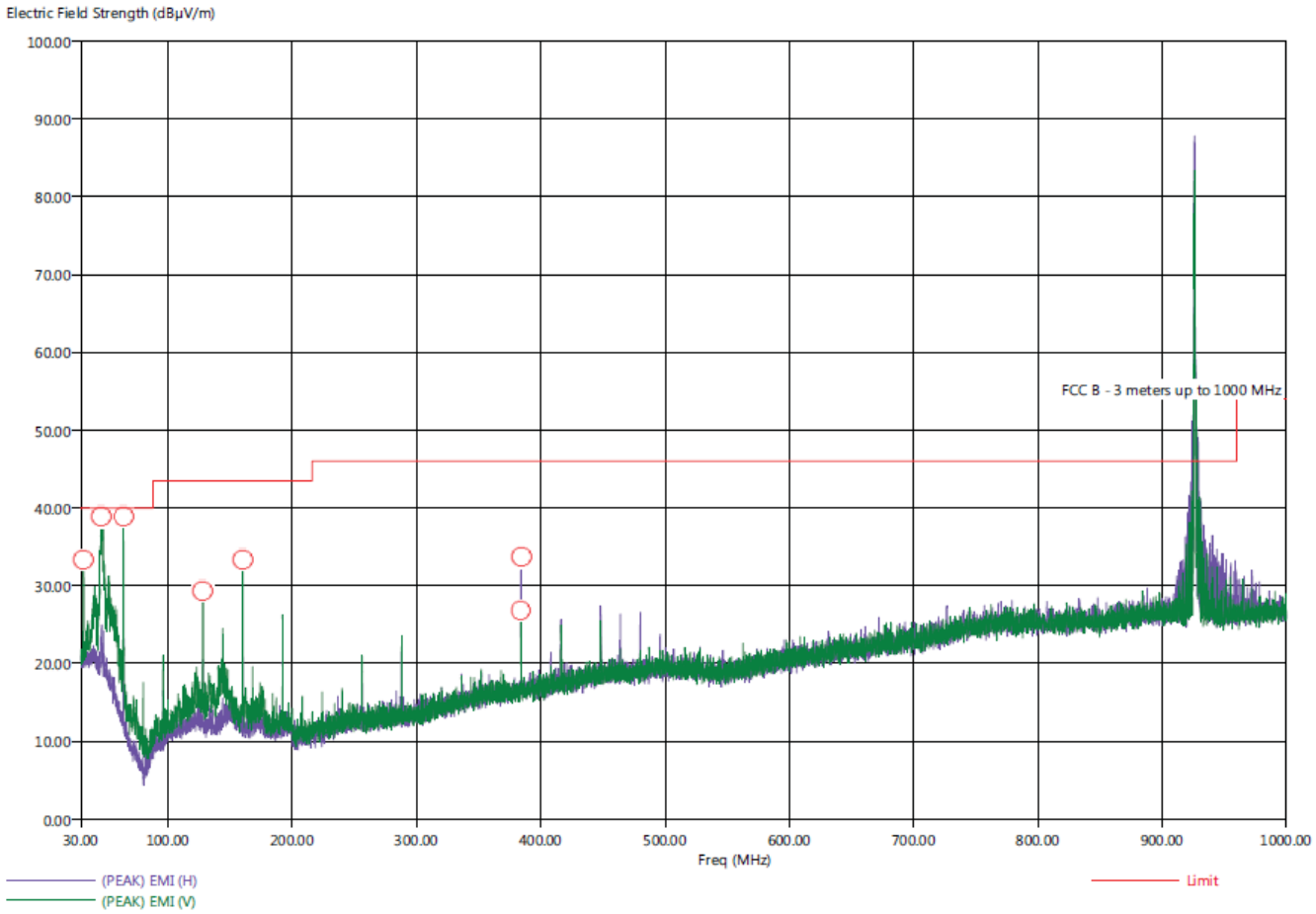

Leap Devices, LLC - Final Scan - FCC Class B
File: Radiated FINAL 30-1000Mhz - FCC B - Y-Axis Worst Case 03-08-2014.set
Operator: Kyle Fujimoto
EUT Type: SK Meter Module
EUT Condition: Everything Connected and Opearting Normally
Comments: Final Scan - FCC Class B
M/N: SK Tx

3/8/2014 6:26:10 PM
Sequence: Final Measurements

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)
32.00	V	34.63	32.47	-5.37	-7.53	40.00	19.27	0.19	343.75	104.77
46.20	V	38.99	36.22	-1.01	-3.78	40.00	17.69	0.15	137.75	99.40
48.00	V	41.49	38.05	1.49	-1.95	40.00	17.27	0.17	356.25	108.23
64.00	V	40.54	39.55	0.54	-0.45	40.00	10.33	0.29	323.75	102.92
128.10	V	30.86	28.63	-12.64	-14.87	43.50	10.18	0.61	270.50	110.80
160.00	V	35.40	34.27	-8.10	-9.23	43.50	8.90	0.86	244.25	101.79
384.00	H	29.40	27.05	-16.60	-18.95	46.00	14.89	1.18	243.75	107.28
384.00	V	30.14	28.35	-15.86	-17.65	46.00	14.89	1.18	298.25	132.53

BAND EDGES

DATA SHEETS

FCC 15.249

Leap Devices, LLC
SK Meter Module
Model: SK Tx

Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Band Edges - Vertical Polarization
Worst Case - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	86.15	V	94	-7.85	Peak	1	217	**Fundamental of**
								Low Channel
902	51.93	V	66	-14.07	Peak	1	217	**Band Edge of Low**
902	43.54	V	46	-2.46	Q.P.	1	217	**Channel**
925.80	84.59	V	94	-9.41	Peak	1.55	251	**Fundamental of**
								High Channel
928	50.73	V	66	-15.27	Peak	1.55	251	**Band Edge of High**
928	43.16	V	46	-2.84	Q.P.	1.55	251	**Channel**

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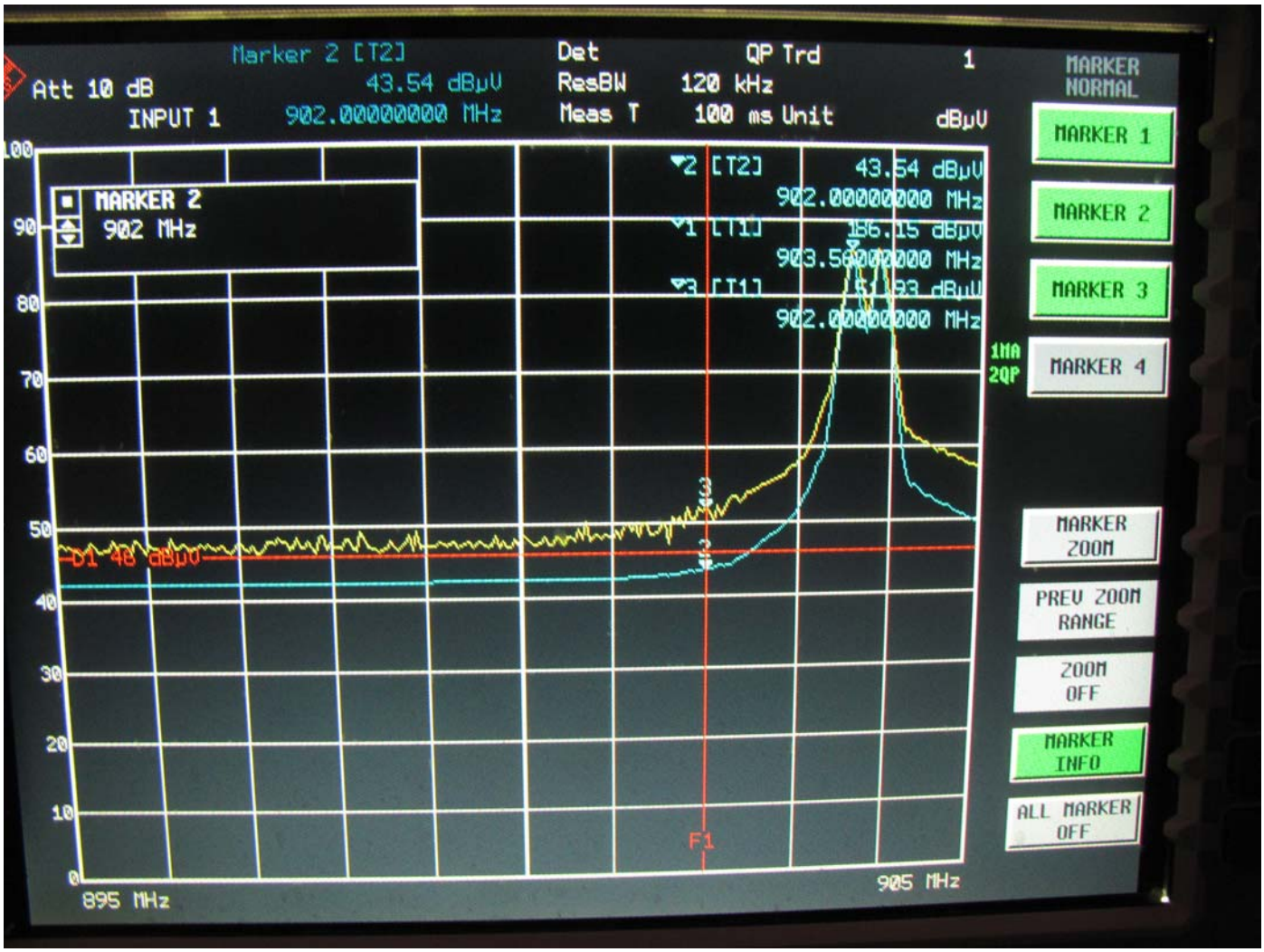
Leap Devices, LLC
SK Meter Module
Model: SK Tx

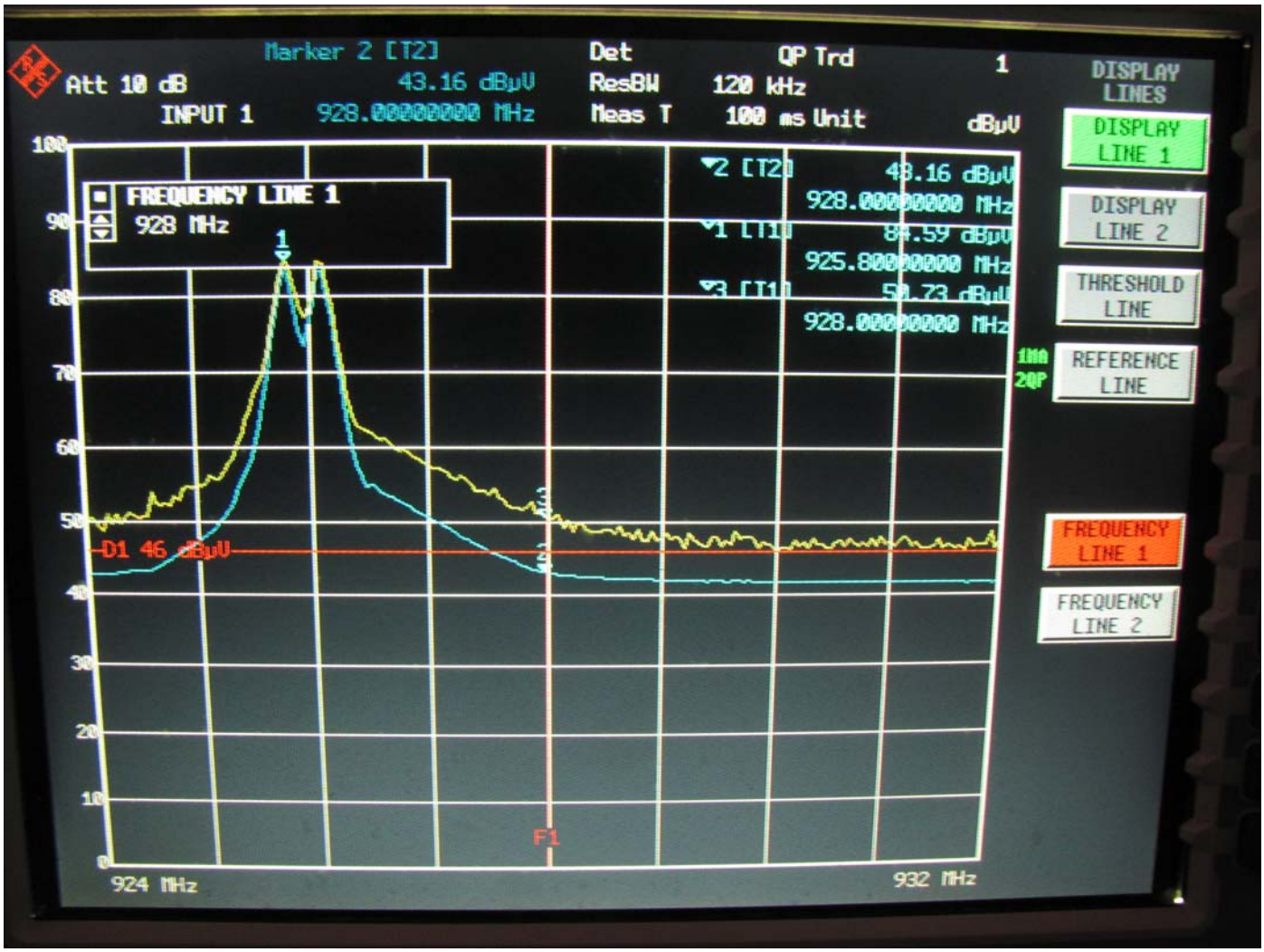
Date: 03/08/2014
Labs: B and D
Tested By: Kyle Fujimoto

Band Edges - Horizontal Polarization
Worst Case - Y-Axis

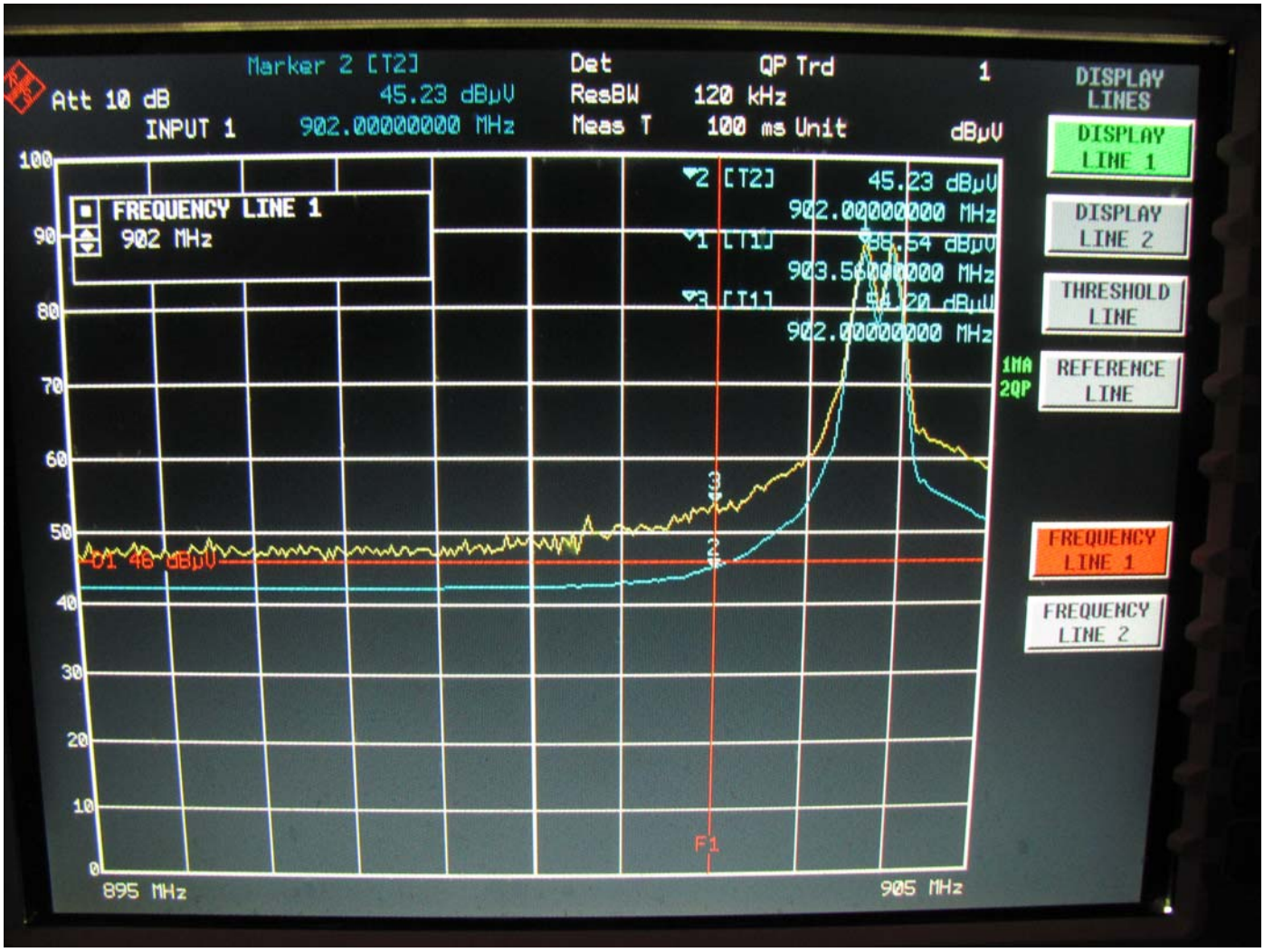
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
903.56	88.54	H	94	-5.46	Peak	1	331	**Fundamental of**
								Low Channel
902	54.2	H	66	-11.8	Peak	1	331	**Band Edge of Low**
902	45.23	H	46	-0.77	Q.P.	1	331	**Channel**
925.80	85.13	H	94	-8.87	Peak	1.16	184	**Fundamental of**
								High Channel
928	50.37	H	66	-15.63	Peak	1.16	184	**Band Edge of High**
928	43.49	H	46	-2.51	Q.P.	1.16	184	**Channel**



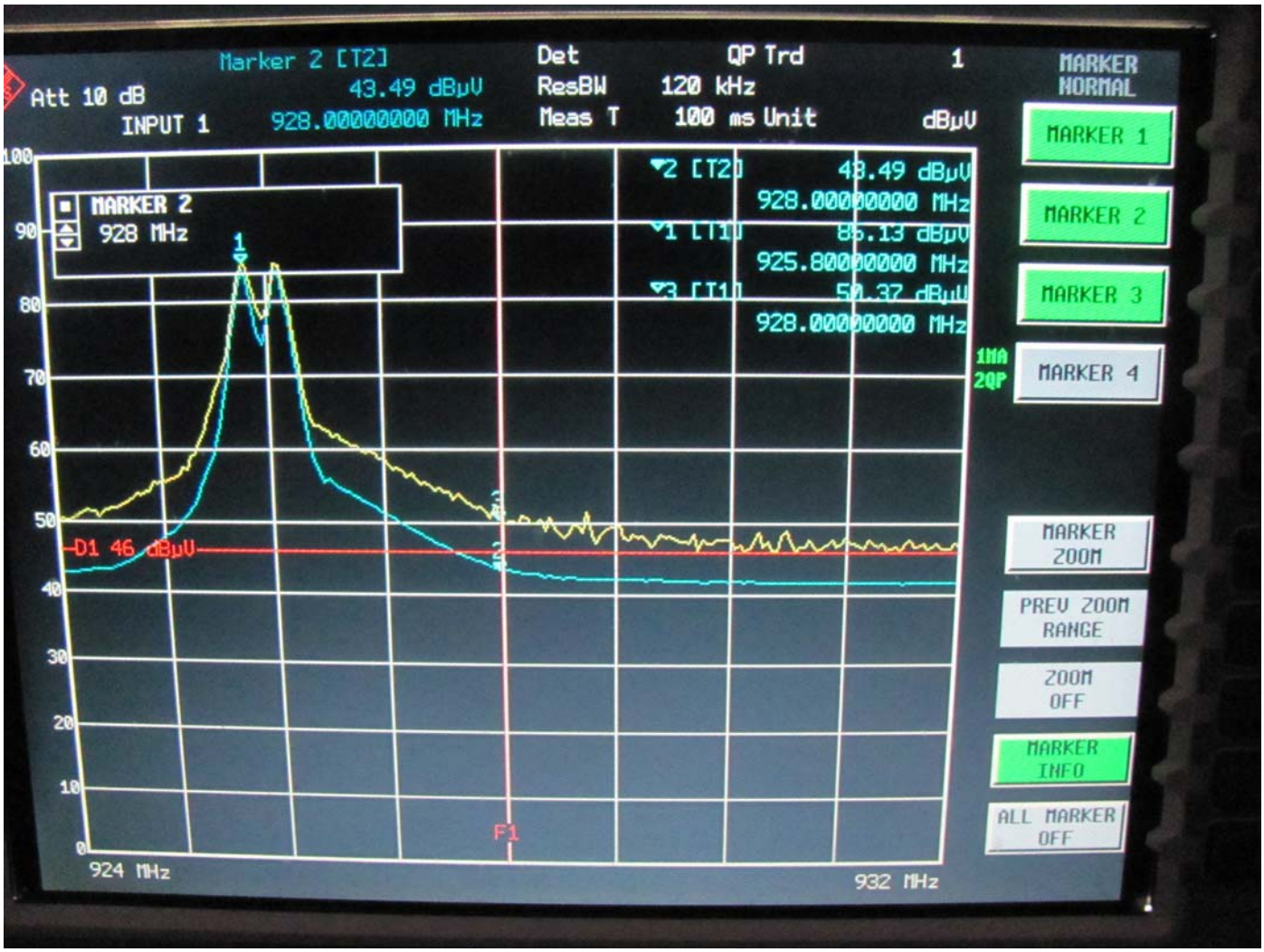
Band Edge for Low Channel – Vertical Polarization – Z-Axis (Worst Case)



Band Edge for High Channel – Vertical Polarization – Z-Axis (Worst Case)



Band Edge for Low Channel – Horizontal Polarization – Y-Axis (Worst Case)



Band Edge for High Channel – Horizontal Polarization – Y-Axis (Worst Case)