

*FCC PART 15, SUBPART B and C
TEST REPORT**for*

RF Module

P/N: K660-066-001

Prepared for
SENSORLINK CORPORATION
P.O. BOX 301 1975 VALLEY HWY 9
ACME, WASHINGTON 98220

Prepared by: *Kyle Fujimoto*

KYLE FUJIMOTO

Approved by: *James Ross*

JAMES ROSS

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114 OLINDA DRIVE
BREA, CALIFORNIA 92823
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DATE: OCTOBER 17, 2005

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	15	2	2	2	14	16	51

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TABLE OF CONTENTS

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

LIST OF APPENDICES

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

LIST OF FIGURES

FIGURE	TITLE
1	Plot Map And Layout of 3 Meter Radiated Test Site

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, NIST or any other agency of the U.S. Government.

Device Tested: RF Module
P/N: K660-066-001
S/N: N/A

Product Description: See Expository Statement

Modifications: No modifications were made during the testing.

Manufacturer: SensorLink Corporation
P.O. Box 301 1975 Valley Hwy. 9
Acme, Washington 98220

Test Date: October 7, 2005

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

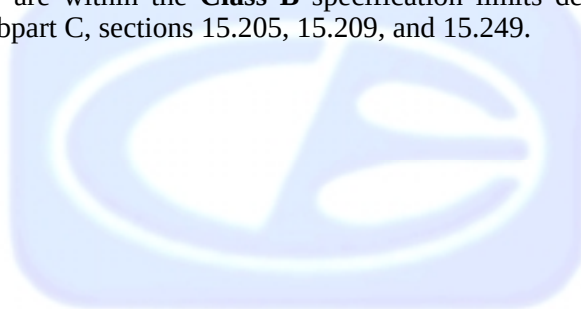
Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and Subpart C, section 15.207
2	Radiated RF Emissions, 10 kHz – 9.214 GHz	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.

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the RF Module P/N: K660-066-001. 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.



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

SensorLink Corporation

Michael Cushing	Engineer
Gary Hielkema	President

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 initial test date of October 7, 2005.

2.5 Disposition of the Test Sample

The sample has not yet been returned to SensorLink Corporation as of 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	Model
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
TX	Transmit
RX	Receive
PCB	Printed Circuit Board

3. APPLICABLE DOCUMENTS

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

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
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

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description Of Test Configuration - EMI

Setup and operation of the equipment under test.

Specifics of the EUT and Peripherals Tested

The RF Module P/N: K660-066-001 (EUT) was connected to a power supply board. The power supply board was also connected to an AC Adapter. The EUT was tested while it was continuously transmitting and in three orthogonal axis. The EUT has an antenna that is soldered to its PCB.

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

4.1.1 Cable Construction and Termination

Cable 1 This is a 13 centimeter cable connecting the EUT to the power supply board. The cable is hard wired at each end.

Cable 2 This is a 1 meter cable connecting the power supply board to the AC Adapter. The cable is hard wired at each end.



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

EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	FCC ID
RF MODULE	SENSORLINK CORPORATION	P/N: K660-066-001	N/A	LM8-K660066001
POWER SUPPLY BOARD	SENSORLINK CORPORATION	BRAD-VLT-STK	N/A	N/A
AC ADAPTER	N/A	KA12D090020023U	N/A	N/A

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
Radiate Emissions Data Capture Program	Compatible Electronics	2.0	N/A	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	June 10, 2005	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22279	June 10, 2005	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	June 11, 2005	1 Year
EMI Receiver	Rohde & Schwarz	ESIB40	100172	October 28, 2004	1 Year
Preamplifier	Com-Power	PA-102	1017	January 5, 2005	1 Year
Microwave Preamplifier	Com-Power	PA-122	25195	February 25, 2005	1 Year
Loop Antenna	Com-Power	AL-130	17070	July 28, 2005	1 Year
Biconical Antenna	Com Power	AB-900	15227	March 11, 2005	1 Year
Log Periodic Antenna	Com Power	AL-100	16060	August 22, 2005	1 Year
Horn Antenna	Antenna Research	DRG-118/A	1053	January 16, 2004	2 Year
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
Antenna Mast	EMCO	2090	9609-1176	N/A	N/A
Turntable	Com Power	TT-100	N/A	N/A	N/A
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Computer	Hewlett Packard	D5251A 888	US74458128	N/A	N/A
Monitor	Hewlett Packard	D5258A	DK74889705	N/A	N/A
LISN	Com Power	LI-215	12078	September 1, 2005	1 Year
LISN	Com Power	LI-215	12082	September 1, 2005	1 Year
Transient Limiter	Seaward	252A910	1	August 17, 2005	1 Year

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 is normally DC powered and is not grounded. The AC Adapter was used in case the EUT is used with any device that normally plugs into the AC public mains.

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 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. 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:

The EUT complies with the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B and the limits defined in CFR Title 47, Part 15, Subpart C, Section 15.207.

7.2 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer was used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com-Power Active Loop Antenna Model: AL-130 was used for frequencies from 9 kHz to 30 MHz, 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 from 1 GHz to 9.214 GHz. The spectrum analyzer was 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 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 9.214 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. 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 loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

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 final test data. The final qualification data sheets are located in Appendix E.

Test Results:

The EUT complies with the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.

8. CONCLUSIONS

The RF Module P/N: K660-066-001 meets all of the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249.



APPENDIX A

LABORATORY RECOGNITIONS

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

Radio-Frequency Technologies (Competent Body)

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.249 or FCC Class B 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

RF Module
P/N: K660-066-001
S/N: N/A

There are no additional models covered under this report.

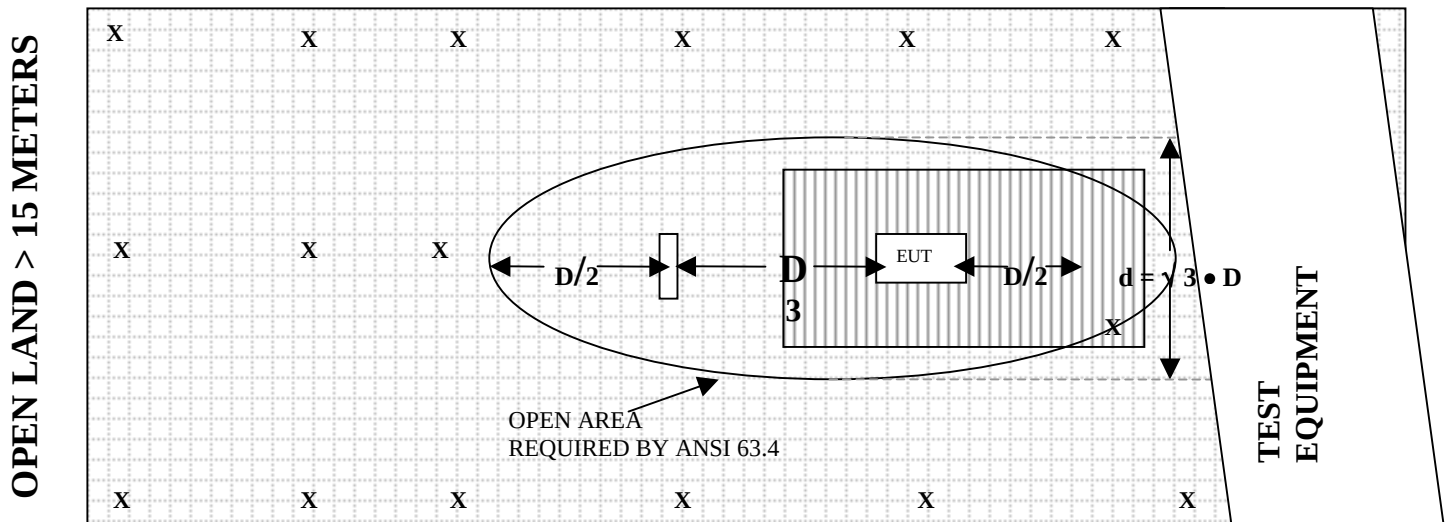


APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: PLOT MAP AND LAYOUT OF 3 METER RADIATED TEST SITE

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

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

COM-POWER AL-130**LOOP ANTENNA**

S/N: 17070

CALIBRATION DATE: JULY 28, 2005

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-43.3	8.16
0.01	-44.1	7.41
0.02	-44.0	7.54
0.05	-42.7	8.8
0.07	-42.0	9.53
0.1	-41.7	9.84
0.2	-43.6	7.87
0.3	-40.9	10.6
0.5	-41.0	10.7
0.7	-40.5	10.97
1	-40.5	11.04
2	-40.5	11.03
3	-40.6	10.9
4	-42.9	8.63
5	-44.3	7.23
10	-53.7	-2.7
15	-62.6	-11.14
20	-58.9	-7.3
25	-51.5	-11.6
30	-63.1	8.9

COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15227

CALIBRATION DATE: SEPTEMBER 29, 2004

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	11.10	120	13.20
35	10.80	125	12.60
40	11.10	140	12.10
45	10.50	150	11.90
50	11.70	160	13.10
60	10.70	175	15.40
70	7.70	180	14.50
80	6.30	200	16.00
90	8.00	250	16.10
100	10.00	300	19.70

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: AUGUST 22, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.73	700	19.72
400	13.38	800	20.49
500	15.12	900	21.31
600	16.27	1000	24.25

ANTENNA RESEARCH DRG-118/A**HORN ANTENNA**

S/N: 1053

CALIBRATION DATE: JANUARY 16, 2004

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.4	10.0	38.7
1.5	25.2	10.5	39.0
2.0	28.2	11.0	38.9
2.5	28.5	11.5	41.3
3.0	30.1	12.0	40.5
3.5	31.0	12.5	40.0
4.0	31.2	13.0	40.2
4.5	31.9	13.5	40.5
5.0	33.2	14.0	41.6
5.5	33.7	14.5	44.8
6.0	34.3	15.0	41.4
6.5	35.0	15.5	39.2
7.0	36.7	16.0	39.4
7.5	37.3	16.5	40.9
8.0	37.1	17.0	42.6
8.5	37.3	17.5	45.1
9.0	37.7	18.0	41.7
9.5	38.6		

COM-POWER PA-102**PREAMPLIFIER**

S/N: 1017

CALIBRATION DATE: JANUARY 5, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.4	300	38.5
40	38.3	350	38.5
50	38.2	400	38.3
60	38.4	450	38.0
70	38.4	500	38.0
80	38.3	550	38.1
90	38.3	600	38.2
100	37.7	650	37.8
125	38.4	700	37.9
150	38.6	750	37.5
175	38.4	800	37.2
200	38.5	850	37.6
225	38.3	900	36.9
250	38.6	950	37.0
275	38.4	1000	36.3

COM-POWER PA-122**MICROWAVE PREAMPLIFIER**

S/N: 25195

CALIBRATION DATE: FEBRUARY 25, 2005

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	31.45	6.0	31.35
1.1	31.34	6.5	31.10
1.2	31.29	7.0	30.54
1.3	31.28	7.5	29.72
1.4	31.25	8.0	29.22
1.5	31.21	8.5	28.75
1.6	31.14	9.0	28.67
1.7	31.07	9.5	29.14
1.8	31.12	10.0	30.12
1.9	31.04	11.0	29.30
2.0	31.20	12.0	29.86
2.5	31.56	13.0	30.57
3.0	32.17	14.0	29.90
3.5	32.56	15.0	30.14
4.0	32.51	16.0	31.13
4.5	32.52	17.0	29.97
5.0	32.33	18.0	28.77
5.5	31.60		



FRONT VIEW

SENSORLINK CORPORATION

RF Module

P/N: K660-066-001

FCC SUBPART B AND C – RADIATED EMISSIONS – 10-07-05

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

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



REAR VIEW

SENSORLINK CORPORATION

RF Module

P/N: K660-066-001

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FRONT VIEW

SENSORLINK CORPORATION

RF Module

P/N: K660-066-001

FCC SUBPART B AND C – RADIATED EMISSIONS – 10-07-05

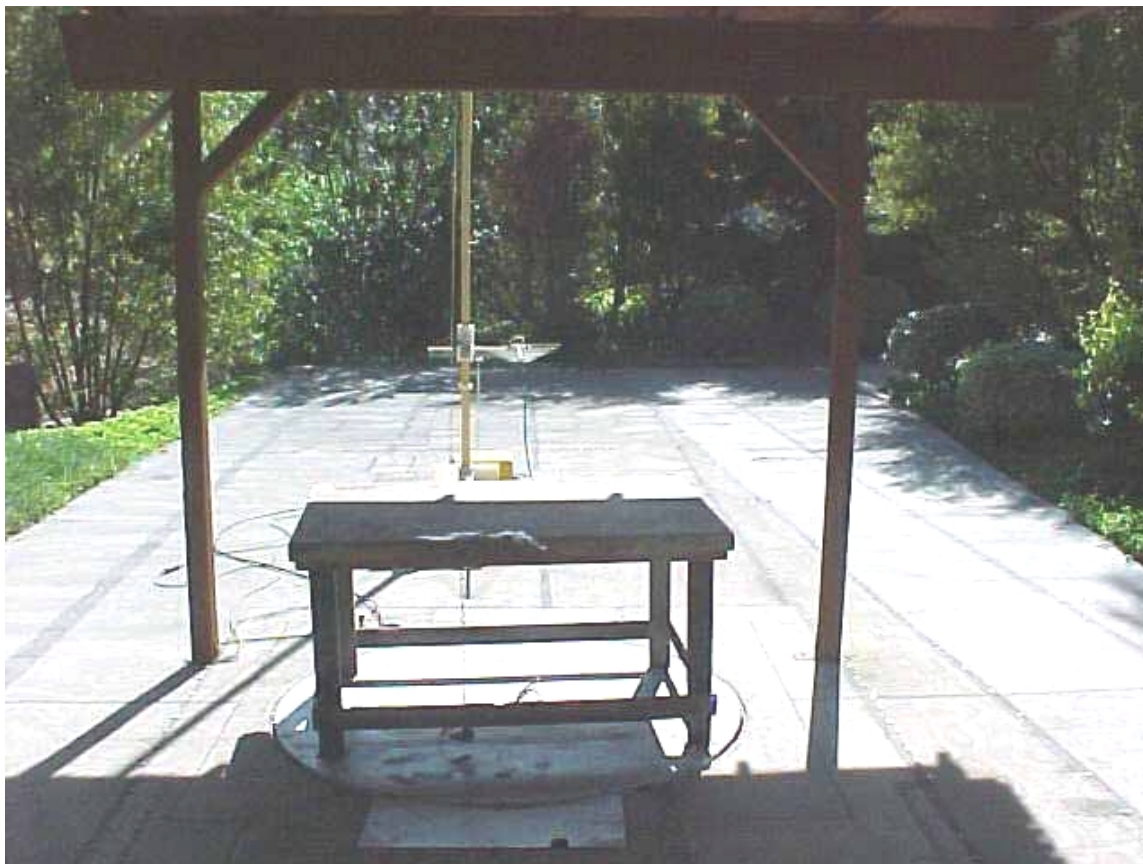
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REAR VIEW

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RF Module

P/N: K660-066-001

FCC SUBPART B AND C – RADIATED EMISSIONS – 10-07-05

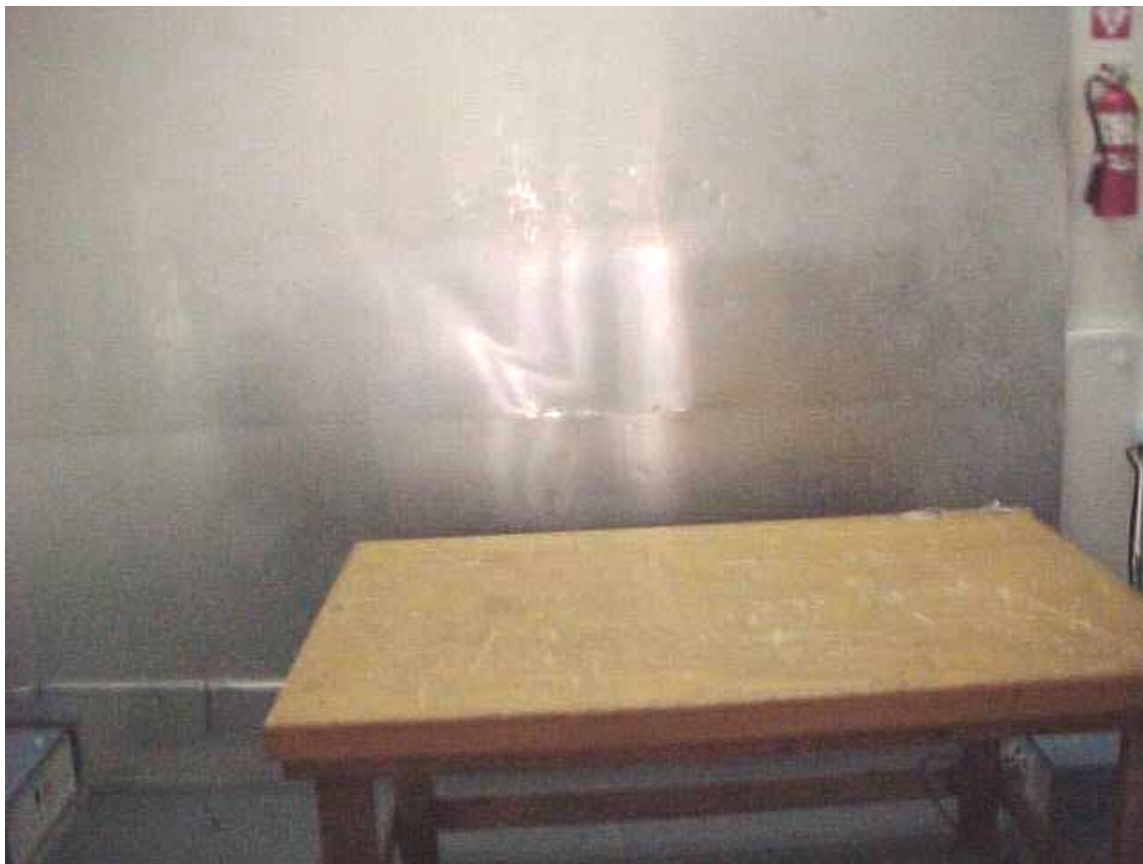
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FRONT VIEW

SENSORLINK CORPORATION

RF Module

P/N: K660-066-001

FCC SUBPART B AND C – CONDUCTED EMISSIONS – 10-07-05

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

Brea Division
114 Olinda Drive
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REAR VIEW

SENSORLINK CORPORATION

RF Module

P/N: K660-066-001

FCC SUBPART B AND C – CONDUCTED EMISSIONS – 10-07-05

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

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(949) 589-0700

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

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

FCC 15.249

Sensorlink Corporation

RF Module

P/N: K660-066-001

Date: 10/04/05

Lab: B

Tested By: Kyle Fujimoto

X-Axis**Transmit Mode**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
916.48	86.42	V	94	-7.58	Peak	1.23	315	
1832.96	45.54	V	74	-28.46	Peak	2.42	180	
2749.44	48.26	V	74	-25.74	Peak	2.31	180	
3665.92	50.83	V	74	-23.17	Peak	1.37	180	
4582.4	48.61	V	74	-25.39	Peak	1.25	225	
5498.88	47.95	V	74	-26.05	Peak	1.25	225	
6415.36		V	74	-74	Peak			No Emissions
6415.36		V	54	-54	Avg			Detected
7331.84		V	74	-74	Peak			No Emissions
7331.84		V	54	-54	Avg			Detected
8248.32		V	74	-74	Peak			No Emissions
8248.32		V	54	-54	Avg			Detected
9164.8		V	74	-74	Peak			No Emissions
9164.8		V	54	-54	Avg			Detected

FCC 15.249

Sensorlink Corporation

RF Module

P/N: K660-066-001

Date: 10/04/05

Lab: B

Tested By: Kyle Fujimoto

X-Axis**Transmit Mode**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
916.48	91.82	H	94	-2.18	Peak	1.23	315	
1832.96	46.37	H	74	-27.63	Peak	1.33	180	
2749.44	47.8	H	74	-26.2	Peak	2.05	225	
3665.92	50.08	H	74	-23.92	Peak	1.35	135	
4582.4	44.99	H	74	-29.01	Peak	2.42	225	
5498.88	47.21	H	74	-26.79	Peak	1.71	225	
6415.36	48.81	H	74	-25.19	Peak	1.49	225	
7331.84		H	74	-74	Peak			No Emissions
7331.84		H	54	-54	Avg			Detected
8248.32		H	74	-74	Peak			No Emissions
8248.32		H	54	-54	Avg			Detected
9164.8		H	74	-74	Peak			No Emissions
9164.8		H	54	-54	Avg			Detected

FCC 15.249

Sensorlink Corporation

RF Module

P/N: K660-066-001

Date: 10/04/05

Lab: B

Tested By: Kyle Fujimoto

Y-Axis**Transmit Mode**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
916.48	91.52	V	94	-2.48	Peak	2.38	225	
1832.96	44.58	V	74	-29.42	Peak	2.59	225	
2749.44	49.63	V	74	-24.37	Peak	2.59	45	
3665.92	50.34	V	74	-23.66	Peak	2.59	315	
4582.4	47.48	V	74	-26.52	Peak	2.02	45	
5498.88	49.22	V	74	-24.78	Peak	2.02	90	
6415.4	48.65	V	74	-25.35	Peak	2.02	180	
7331.84		V	74	-74	Peak			No Emissions
7331.84		V	54	-54	Avg			Detected
8248.32		V	74	-74	Peak			No Emissions
8248.32		V	54	-54	Avg			Detected
9164.8		V	74	-74	Peak			No Emissions
9164.8		V	54	-54	Avg			Detected

FCC 15.249

Sensorlink Corporation
 RF Module
 P/N: K660-066-001

Date: 10/04/05
 Lab: B
 Tested By: Kyle Fujimoto

Y-Axis**Transmit Mode**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
916.48	84.62	H	94	-9.38	Peak	2.38	225	
1832.96	44.45	H	74	-29.55	Peak	1.96	225	
2749.44	43.89	H	74	-30.11	Peak	1.08	270	
3665.92	46.99	H	74	-27.01	Peak	1.9	45	
4582.4	46.5	H	74	-27.5	Peak	2.34	45	
5498.88		H	74	-74	Peak			No Emissions
5498.88		H	54	-54	Avg			Detected
6415.36		H	74	-74	Peak			No Emissions
6415.36		H	54	-54	Avg			Detected
7331.84		H	74	-74	Peak			No Emissions
7331.84		H	54	-54	Avg			Detected
8248.32		H	74	-74	Peak			No Emissions
8248.32		H	54	-54	Avg			Detected
9164.8		H	74	-74	Peak			No Emissions
9164.8		H	54	-54	Avg			Detected

FCC 15.249

Sensorlink Corporation

RF Module

P/N: K660-066-001

Date: 10/04/05

Lab: B

Tested By: Kyle Fujimoto

Z-Axis**Transmit Mode**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
916.48	81.42	V	94	-12.58	Peak	2.26	270	
1832.96	44.29	V	74	-29.71	Peak	1.71	180	
2749.44	44.03	V	74	-29.97	Peak	2.28	180	
3665.92	50.11	V	74	-23.89	Peak	1.89	225	
4582.4	45.87	V	74	-28.13	Peak	2.39	225	
5498.88	48.05	V	74	-25.95	Peak	2.39	270	
6415.36		V	74	-74	Peak			No Emissions
6415.36		V	54	-54	Avg			Detected
7331.84		V	74	-74	Peak			No Emissions
7331.84		V	54	-54	Avg			Detected
8248.32		V	74	-74	Peak			No Emissions
8248.32		V	54	-54	Avg			Detected
9164.8		V	74	-74	Peak			No Emissions
9164.8		V	54	-54	Avg			Detected

FCC 15.249

Sensorlink Corporation

RF Module

P/N: K660-066-001

Date: 10/04/05

Lab: B

Tested By: Kyle Fujimoto

Z-Axis**Transmit Mode**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
916.48	89.12	H	94	-4.88	Peak	2.69	135	
1832.96	41.9	H	74	-32.1	Peak	2.88	90	
2749.44	49.11	H	74	-24.89	Peak	1.78	180	
3665.92	49.88	H	74	-24.12	Peak	2.59	315	
4582.4	46.89	H	74	-27.11	Peak	2.6	0	
5498.88	47.03	H	74	-26.97	Peak	1.94	315	
6415.36	50.66	H	74	-23.34	Peak	1.79	225	
7331.84		H	74	-74	Peak			No Emissions
7331.84		H	54	-54	Avg			Detected
8248.32		H	74	-74	Peak			No Emissions
8248.32		H	54	-54	Avg			Detected
9164.8		H	74	-74	Peak			No Emissions
9164.8		H	54	-54	Avg			Detected

Sensorlink Corporation
RF Module
P/N: K660-066-001

Date: 10/04/05
Lab: B
Tested By: Kyle Fujimoto

[illegible]

Test Location	: Compatible Electronics	Page	: 1/1
Customer	: Sensorlink Corporation	Date	: 10/04/2005
Manufacturer	: Sensorlink Corporation	Time	: 10:48:33
Eut name	: RF Module	Lab	: D
Model	: P/N: K660-066-001	Test Distance	: 3 Meters
Serial #	: N/A		
Specification	: FCC B		
Distance correction factor (20 * log(test/spec))			: 0.00
Test Mode	: Spurious Emissions - 10 kHz to 1000 MHz Vertical and Horizontal Polarization Temperature 69 Degrees F., Relative Humidity 72% Test Engineer: Kyle Fujimoto		

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1V	56.420	46.60	0.87	11.04	38.33	20.17	40.00	-19.83
2V	60.100	51.10	0.90	10.67	38.40	24.27	40.00	-15.73
3H	60.450	39.90	0.90	10.55	38.40	12.95	40.00	-27.05
4H	125.090	46.90	1.30	12.60	38.40	22.40	43.50	-21.10
5V	160.100	42.30	1.34	13.12	38.52	18.24	43.50	-25.26
6H	240.085	41.30	1.76	16.08	38.48	20.66	46.00	-25.34
7H	260.085	36.30	1.88	16.88	38.52	16.55	46.00	-29.45
8H	309.690	45.60	2.06	12.80	38.50	21.96	46.00	-24.04
9V	334.173	41.60	2.21	12.97	38.50	18.28	46.00	-27.72
10V	374.973	38.20	2.35	13.23	38.40	15.39	46.00	-30.61
11V	383.841	40.90	2.37	13.29	38.36	18.19	46.00	-27.81
12V	430.284	38.80	2.52	13.95	38.11	17.16	46.00	-28.84
13V	448.105	44.00	2.59	14.27	38.01	22.85	46.00	-23.15
14H	875.450	34.60	3.60	21.12	37.24	22.08	46.00	-23.92

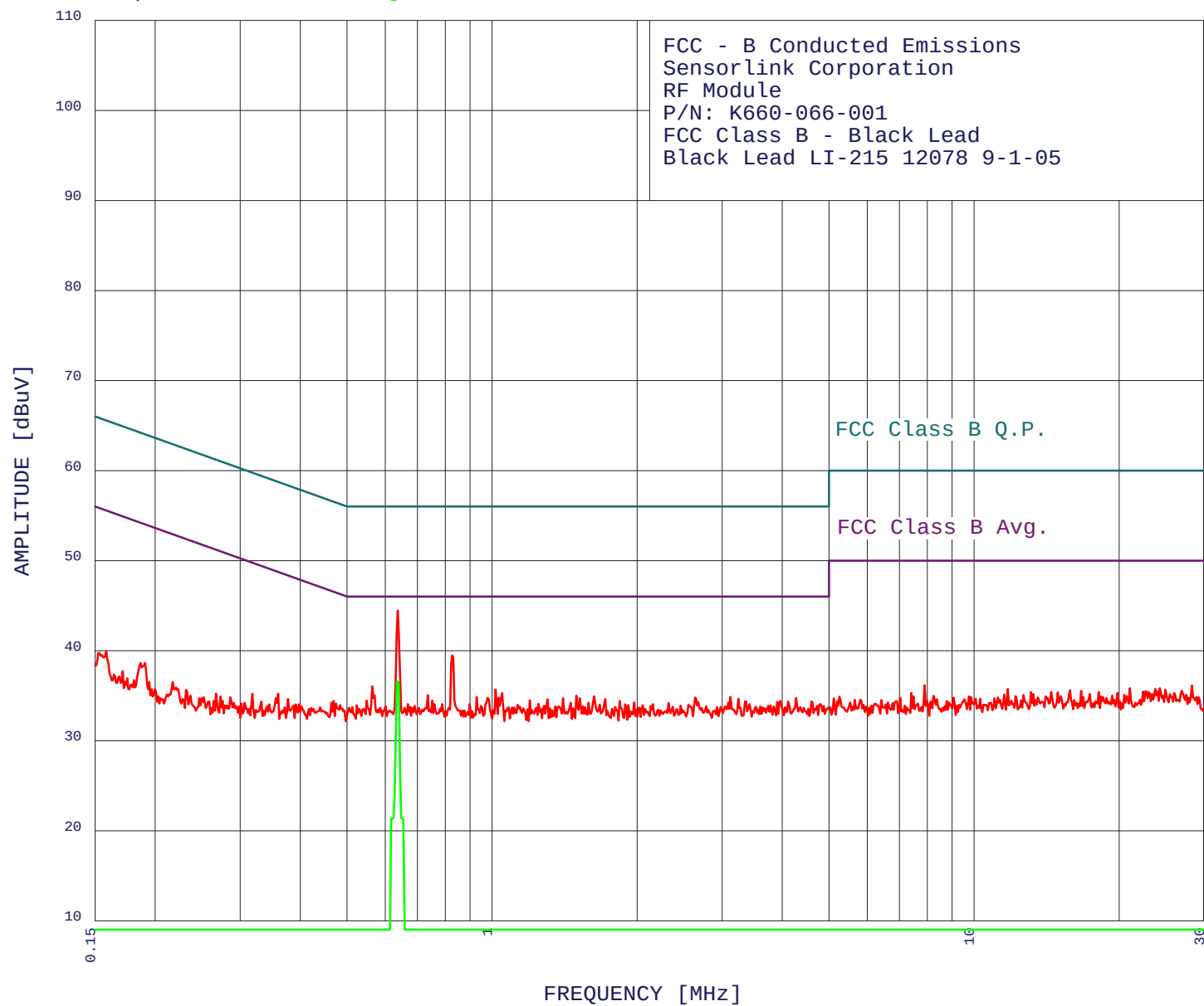
CONDUCTED EMISSIONS

DATA SHEETS

EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average

10/04/2005

9:24:10




**COMPATIBLE
ELECTRONICS**

10/04/2005

9:24:10

FCC - B Conducted Emissions

Sensorlink Corporation

RF Module

P/N: K660-066-001

FCC Class B - Black Lead

Black Lead LI-215 12078 9-1-05

TEST ENGINEER : Kyle Fujimoto

49 highest peaks above -50.00 dB of FCC Class B Avg. limit line

Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.637	44.44	46.00	-1.56**
2	0.826	39.45	46.00	-6.55
3	0.564	36.04	46.00	-9.96
4	1.016	35.67	46.00	-10.33
5	1.049	35.27	46.00	-10.73
6	0.735	35.05	46.00	-10.95
7	1.496	35.00	46.00	-11.00
8	1.629	34.91	46.00	-11.09
9	0.929	34.86	46.00	-11.14
10	3.124	34.84	46.00	-11.16
11	2.637	34.79	46.00	-11.21
12	0.979	34.76	46.00	-11.24
13	4.272	34.72	46.00	-11.28
14	1.520	34.70	46.00	-11.30
15	1.404	34.69	46.00	-11.31
16	3.243	34.65	46.00	-11.35
17	1.717	34.61	46.00	-11.39
18	1.304	34.59	46.00	-11.41
19	1.197	34.48	46.00	-11.52
20	0.751	34.45	46.00	-11.55
21	0.550	34.44	46.00	-11.56
22	1.840	34.42	46.00	-11.58
23	3.966	34.40	46.00	-11.60
24	3.365	34.36	46.00	-11.64
25	4.600	34.34	46.00	-11.66
26	4.114	34.31	46.00	-11.69
27	3.903	34.30	46.00	-11.70
28	1.971	34.23	46.00	-11.77
29	1.586	34.20	46.00	-11.80
30	1.456	34.20	46.00	-11.80
31	2.322	34.16	46.00	-11.84
32	1.249	34.08	46.00	-11.92
33	0.899	34.06	46.00	-11.94
34	4.799	34.06	46.00	-11.94
35	0.788	34.05	46.00	-11.95
36	0.759	34.05	46.00	-11.95
37	2.156	34.05	46.00	-11.95
38	0.669	34.04	46.00	-11.96
39	1.889	34.02	46.00	-11.98
40	2.554	33.98	46.00	-12.02
41	1.130	33.97	46.00	-12.03
42	2.055	33.94	46.00	-12.06
43	0.524	33.93	46.00	-12.07
44	1.918	33.92	46.00	-12.08
45	3.781	33.89	46.00	-12.11
46	0.469	34.42	46.53	-12.11
47	2.462	33.88	46.00	-12.12
48	0.601	33.84	46.00	-12.16
49	1.352	33.79	46.00	-12.21

* Please See the Average Readings on the Next Page and on the Plot

**COMPATIBLE
ELECTRONICS**

10/04/2005

9:24:10

FCC - B Conducted Emissions
Sensorlink Corporation
RF Module

P/N: K660-066-001

FCC Class B - Black Lead

Black Lead LI-215 12078 9-1-05

TEST ENGINEER : Kyle Fujimoto

1 highest peaks above -50.00 dB of FCC Class B Avg. limit line

Peak criteria : 0.10 dB, Curve : Average

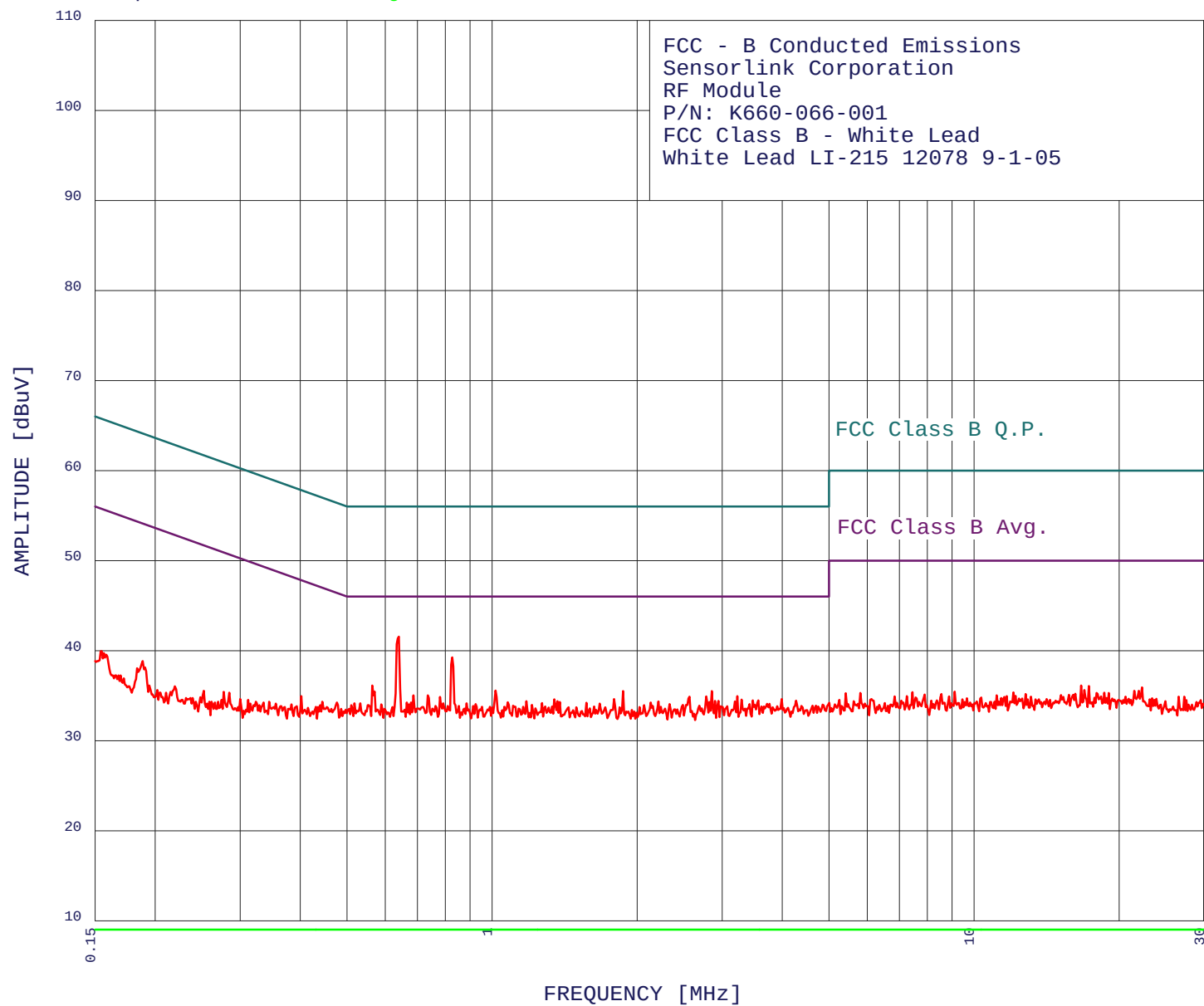
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
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1	0.637	36.58	46.00	-9.42
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EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average

10/04/2005

9:25:40





10/04/2005

9:25:40

FCC - B Conducted Emissions
Sensorlink Corporation
RF Module

P/N: K660-066-001

FCC Class B - White Lead

White Lead LI-215 12078 9-1-05

TEST ENGINEER : Kyle Fujimoto

49 highest peaks above -50.00 dB of FCC Class B Avg. limit line

Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.641	41.54	46.00	-4.46
2	0.826	39.25	46.00	-6.75
3	0.564	36.13	46.00	-9.87
4	1.016	35.56	46.00	-10.44
5	1.869	35.52	46.00	-10.48
6	2.855	35.51	46.00	-10.49
7	0.735	35.04	46.00	-10.96
8	0.686	35.04	46.00	-10.96
9	3.226	34.94	46.00	-11.06
10	2.781	34.90	46.00	-11.10
11	2.568	34.88	46.00	-11.12
12	0.779	34.85	46.00	-11.15
13	3.987	34.62	46.00	-11.38
14	1.790	34.61	46.00	-11.39
15	1.345	34.58	46.00	-11.42
16	3.294	34.55	46.00	-11.45
17	3.565	34.48	46.00	-11.52
18	4.272	34.45	46.00	-11.55
19	2.948	34.42	46.00	-11.58
20	2.900	34.41	46.00	-11.59
21	1.367	34.38	46.00	-11.62
22	1.178	34.37	46.00	-11.63
23	2.214	34.34	46.00	-11.66
24	3.192	34.34	46.00	-11.66
25	1.382	34.28	46.00	-11.72
26	1.077	34.26	46.00	-11.74
27	0.679	34.24	46.00	-11.76
28	0.665	34.24	46.00	-11.76
29	2.134	34.24	46.00	-11.76
30	1.569	34.20	46.00	-11.80
31	1.269	34.18	46.00	-11.82
32	0.885	34.15	46.00	-11.85
33	0.518	34.13	46.00	-11.87
34	0.532	34.13	46.00	-11.87
35	1.671	34.10	46.00	-11.90
36	3.761	34.10	46.00	-11.90
37	3.419	34.06	46.00	-11.94
38	2.334	34.06	46.00	-11.94
39	0.924	34.05	46.00	-11.95
40	0.589	34.03	46.00	-11.97
41	1.210	33.97	46.00	-12.03
42	2.488	33.97	46.00	-12.03
43	0.510	33.94	46.00	-12.06
44	0.555	33.93	46.00	-12.07
45	2.066	33.93	46.00	-12.07
46	1.106	33.87	46.00	-12.13
47	0.763	33.84	46.00	-12.16
48	0.476	34.24	46.40	-12.17
49	3.075	33.83	46.00	-12.17
