

*FCC PART 15, SUBPART B and C
TEST REPORT*
for
TRANSMITTER
MODEL: 84-941-XX

Prepared for

 SHURflo, LLC
 5900 KATELLA AVENUE
 CYPRESS, CALIFORNIA 90630

 Prepared by: *James Ross*

JAMES ROSS

 Approved by: *Kyle Fujimoto*

KYLE FUJIMOTO

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

DATE: NOVEMBER 22, 2005

	REPORT BODY	APPENDICES					TOTAL
		A	B	C	D	E	
PAGES	15	2	2	12	16	49	

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



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	13
7.2 Bandwidth of the Fundamental	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 <ul style="list-style-type: none">• Test Setup Diagrams• Radiated Emissions Photos• Antenna and Effective Gain Factors
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Plot Map And Layout of 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: Transmitter
 Model: 84-941-XX
 S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was modified in order to meet the specifications. Please see the list located in Appendix B.

Manufacturer: SHURflo, LLC
 5900 Katella Avenue
 Cypress, California 90630

Test Date: November 22, 2005

Test Specifications: EMI requirements
 CFR Title 47, Part 15 Subpart B; and Subpart C, Sections 15.205, 15.209, and 15.231

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 operates on batteries only and cannot be plugged into the AC public mains.
2	Radiated RF Emissions, 10 kHz – 4340 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.
3	-20 dB Bandwidth of the Fundamental	Complies with the limits of Subpart C, sections 15.231 [e].



1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Transmitter Model: 84-941-XX. 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 15.231.



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

SHURflo, LLC

Bernard Perkins	Project Engineer
Quang Truong	Electrical Engineer

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 its qualification testing on November 22, 2005.

2.5 Disposition of the Test Sample

The test sample has not been returned to SHURflo, LLC as of November 22, 2005.

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
PCB	Printed Circuit Board
TX	Transmit
RX	Receive



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 Transmitter Model: 84-941-XX (EUT) was tested as a stand-alone unit and tested in three orthogonal axis. The EUT was continuously transmitting.

The antenna is a trace on the PCB of the EUT.

After the transmitter is activated, the transmission will cease operation within 5 seconds after activation.

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



4.1.1 **Cable Construction and Termination**

There were no external cables connected to the EUT.



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

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
TRANSMITTER (EUT)	SHURflo, LLC	84-941-XX	N/A	TLC-84941XX



5.2 **EMI Test Equipment**

EQUIPMENT TYPE	MANUFACTURER	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
Preamplifier	Com Power	PA-103	1582	February 3, 2005	1 Year
Microwave Preamplifier	Com-Power	PA-122	181917	March 3, 2005	1 Year
Loop Antenna	Com-Power	AL-130	17089	September 3, 2004	2 Year
Biconical Antenna	Com Power	AB-900	15250	March 11, 2005	1 Year
Log Periodic Antenna	Com Power	AL-100	16247	August 22, 2005	1 Year
Horn Antenna	Com Power	AH-118	10073	July 27, 2004	2 Year
Antenna Mast	Com-Power	AM-100	N/A	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



6. TEST SITE DESCRIPTION

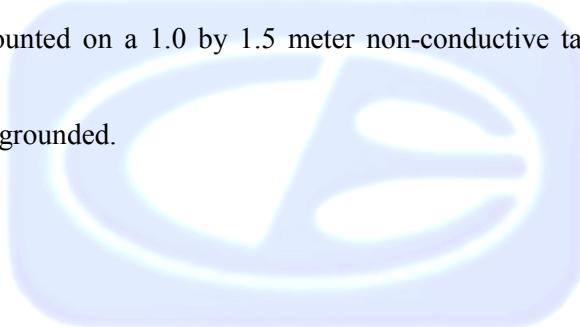
6.1 Test Facility Description

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 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer and EMI Receiver were used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-103 was used for frequencies from 30 MHz to 1 GHz, and the Com-Power Microwave Preamplifier Model: PA-122 was used for frequencies above 1 GHz. The spectrum analyzer was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer and EMI Receiver record 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 4.34 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.



Radiated Emissions (Spurious and Harmonics) Test (continued)

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 limits of CFR Title 47, Part 15, Subpart B; and Subpart C, section 15.205, 15.209 and 15.231 for radiated emissions.

7.2

Bandwidth of the Fundamental

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the EUT. Photographs of the -20 dB bandwidth are located in Appendix E.

Test Results:

The EUT complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231 [c].



8. CONCLUSIONS

The Transmitter, Model: 84-941-XX 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 15.231.



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 15.231 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.

Modifications:

- A 6pF capacitor (Reference C5) has been removed from the circuit.
- A reference 6pF capacitor (Reference C6) remains between the output of the transmitter and ground.



APPENDIX C

***ADDITIONAL MODELS COVERED
UNDER THIS REPORT***



ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Transmitter
Model: 84-941-XX
S/N: N/A

There were no additional models covered under this report.



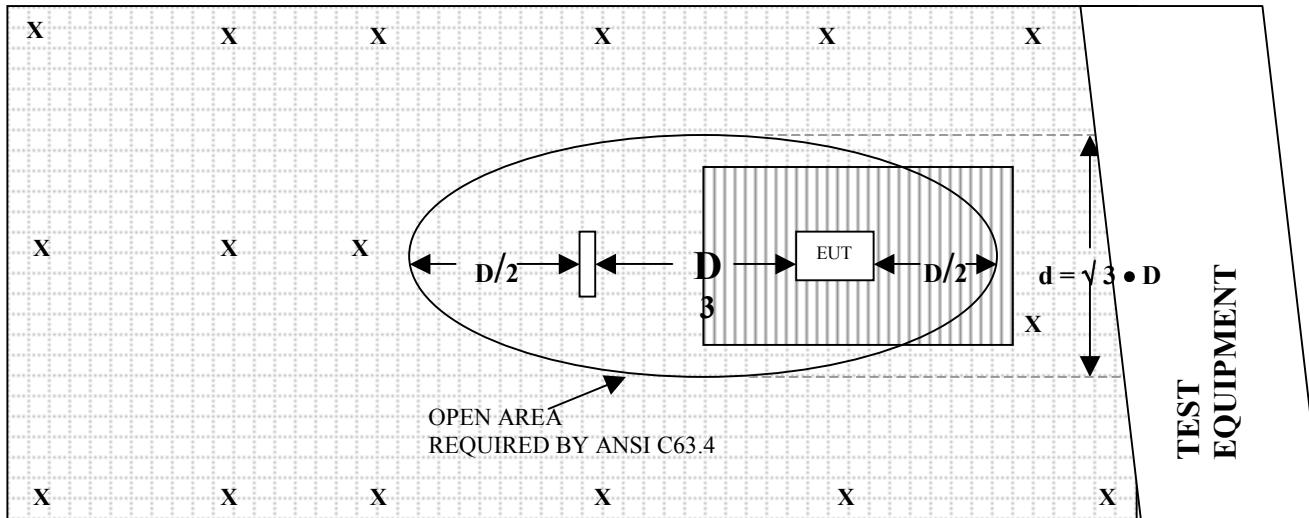
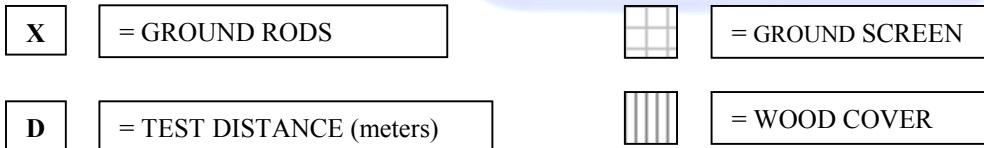
APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS



FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED TEST SITE
OPEN LAND > 15 METERS

OPEN LAND > 15 METERS


OPEN LAND > 15 METERS


COM-POWER AL-130**LOOP ANTENNA****S/N: 17089****CALIBRATION DATE: SEPTEMBER 3, 2004**

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-40.8	10.7
0.01	-40.9	10.6
0.02	-41.8	9.7
0.05	-42.0	9.5
0.07	-41.5	10.0
0.1	-41.7	9.8
0.2	-44.1	7.4
0.3	-41.6	9.9
0.5	-41.5	10.0
0.7	-41.4	10.1
1	-41.0	10.5
2	-40.6	10.9
3	-40.8	10.7
4	-41.0	10.5
5	-40.4	11.1
10	-40.7	10.8
15	-41.6	9.9
20	-41.3	10.2
25	-43.0	8.5
30	-42.6	8.9



COM-POWER AB-900**BICONICAL ANTENNA****S/N: 15250****CALIBRATION DATE: MARCH 11, 2005**

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	10.90	120	13.10
35	10.90	125	12.40
40	10.90	140	11.90
45	10.30	150	11.80
50	11.40	160	13.30
60	10.40	175	15.40
70	7.40	180	14.60
80	6.20	200	15.70
90	8.20	250	16.50
100	10.10	300	19.20



COM-POWER AL-100**LOG PERIODIC ANTENNA****S/N: 16247****CALIBRATION DATE: AUGUST 22, 2005**

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.70	700	19.72
400	13.19	800	20.59
500	14.99	900	21.10
600	15.95	1000	24.35



COM POWER AH-118**HORN ANTENNA****S/N: 10073****CALIBRATION DATE: JULY 27, 2004**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	25.3	10.0	39.8
1.5	28.3	10.5	38.6
2.0	31.5	11.0	38.5
2.5	31.2	11.5	40.4
3.0	30.4	12.0	42.0
3.5	30.5	12.5	41.7
4.0	30.9	13.0	41.9
4.5	32.0	13.5	43.7
5.0	34.1	14.0	45.5
5.5	33.7	14.5	45.8
6.0	34.2	15.0	40.5
6.5	35.1	15.5	41.8
7.0	37.1	16.0	41.5
7.5	40.4	16.5	40.2
8.0	39.8	17.0	43.3
8.5	38.4	17.5	46.6
9.0	37.5	18.0	47.1
9.5	42.4		



COM-POWER PA-103**PREAMPLIFIER****S/N: 1582****CALIBRATION DATE: FEBRUARY 3, 2005**

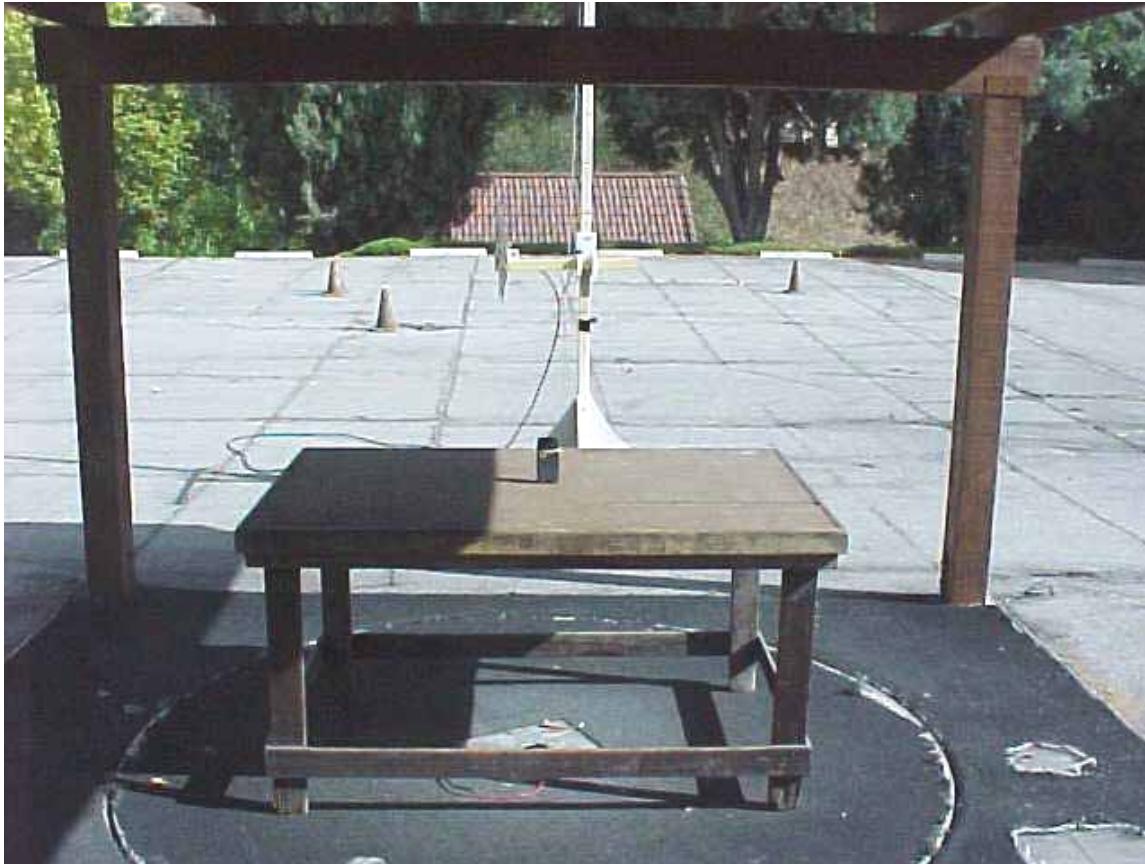
FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	33.2	300	33.0
40	33.0	350	32.8
50	33.1	400	32.8
60	33.0	450	32.8
70	33.2	500	32.5
80	33.2	550	32.5
90	33.1	600	32.4
100	33.2	650	32.4
125	33.1	700	32.3
150	33.0	750	32.2
175	33.0	800	32.2
200	33.0	850	32.4
225	33.0	900	31.8
250	33.0	950	32.3
275	32.9	1000	32.0



COM-POWER PA-122
MICROWAVE PREAMPLIFIER
S/N: 181917
CALIBRATION DATE: MARCH 3, 2005

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.00	34.780	6.00	35.568
1.25	34.443	6.50	34.984
1.50	33.921	7.00	33.916
1.75	33.862	7.50	33.463
2.00	33.646	8.00	33.932
2.25	33.784	8.50	34.828
2.50	33.892	9.00	36.153
2.75	33.886	9.50	36.797
3.00	33.921	10.00	36.822
3.25	33.943	11.00	33.815
3.50	34.076	12.00	33.733
3.75	34.232	13.00	34.807
4.00	34.464	14.00	34.121
4.25	34.613	15.00	33.122
4.50	34.929	16.00	34.286
4.75	35.164	17.00	34.358
5.00	35.321	18.00	33.767
5.50	35.366		



**FRONT VIEW**

SHURFlo, LLC
TRANSMITTER
MODEL: 84-941-XX

FCC SUBPART B AND C – RADIATED EMISSIONS – 10 kHz to 1 GHz – 11-22-05

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



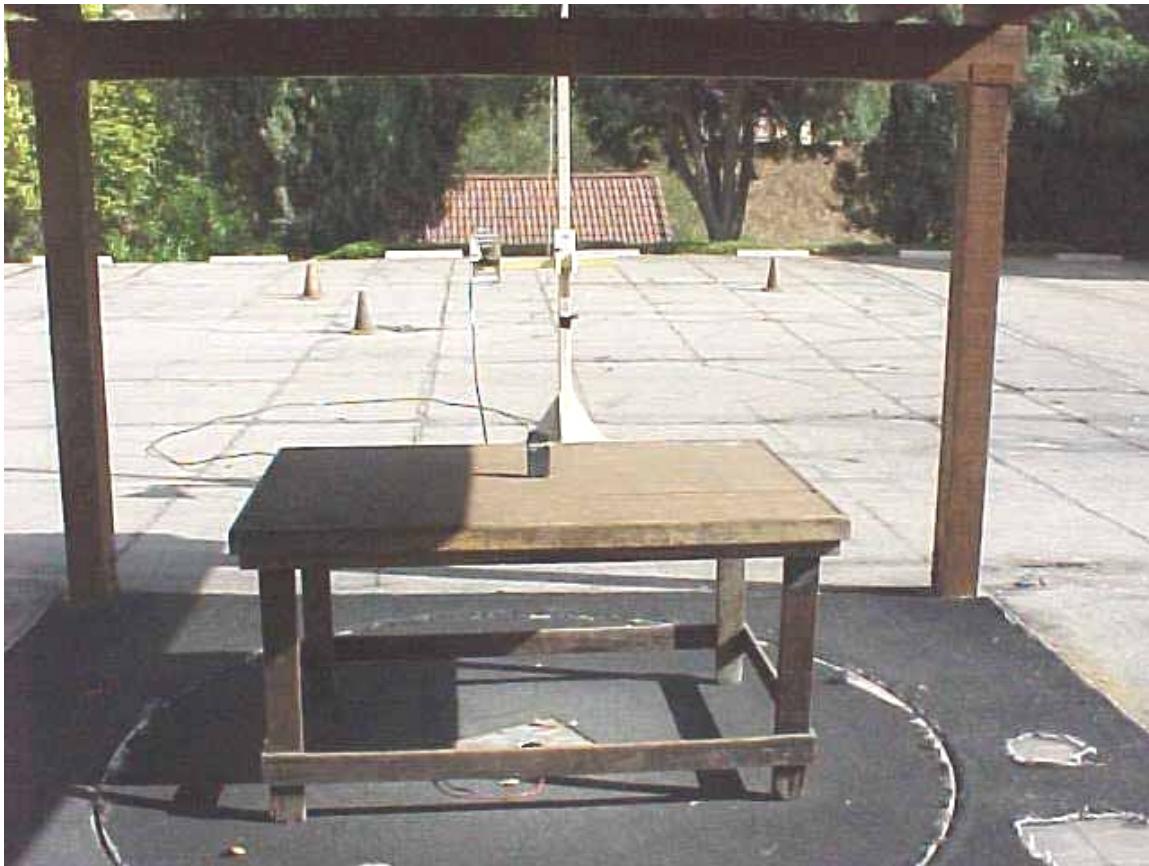
**REAR VIEW**

SHURFLO, LLC
TRANSMITTER
MODEL: 84-941-XX

FCC SUBPART B AND C – RADIATED EMISSIONS – 10 kHz to 1 GHz – 11-22-05

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



**FRONT VIEW**

SHURFlo, LLC
TRANSMITTER
MODEL: 84-941-XX

FCC SUBPART B AND C – RADIATED EMISSIONS – 1 GHz to 4.34 GHz – 11-22-05

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



**REAR VIEW****SHURFlo, LLC****TRANSMITTER****MODEL: 84-941-XX****FCC SUBPART B AND C – RADIATED EMISSIONS – 1 GHz to 4.34 GHz – 11-22-05****PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

APPENDIX E

DATA SHEETS



RADIATED EMISSIONS

DATA SHEETS



RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 1 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 2 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 3 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 4 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 5 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 6 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 7 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 8 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 9 of PAGE 10

RADIATED EMISSIONS (FCC SECTION 15.205 AND 15.231)

COMPANY	SHURflo, LLC	DATE	11/22/05
EUT	Transmitter	DUTY CYCLE	10.7 %
MODEL	89-941-XX	PEAK TO AVG	-19.4123244 dB
S/N	N/A	TEST DIST.	3 Meters
TEST ENGINEER	Kyle Fujimoto	LAB	A

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

** DELTA = SPEC LIMIT - CORRECTED READING

PAGE 10 of PAGE 10

Test Location : Compatible Electronics Page : 1/1
 Customer : SHURflo Date : 11/22/2005
 Manufacturer : SHURflo Time : 17: 31: 30
 Eut name : Transmitter Lab : A
 Model : 84-941-XX Test Distance : 3.0 Meters
 Serial # : N/A
 Specification : FCC B
 Distance correction factor (20 * log(test/spec)) : 0.00
 Test Mode : Spurious Emissions Test Frequency Range: 10 kHz to 4340 MHz
 Note(s): Excludes the Transmitter's Fundamental and Harmonics
 Polarization(s): Vertical and Horizontal
 Test Engineer: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor' d rdg = R dBuV	Li mit = L dBuV/m	Delta R-L dB
-----	-------------	--------------	---------------------	---------------------	-------------------	---------------------------	-------------------------	--------------------

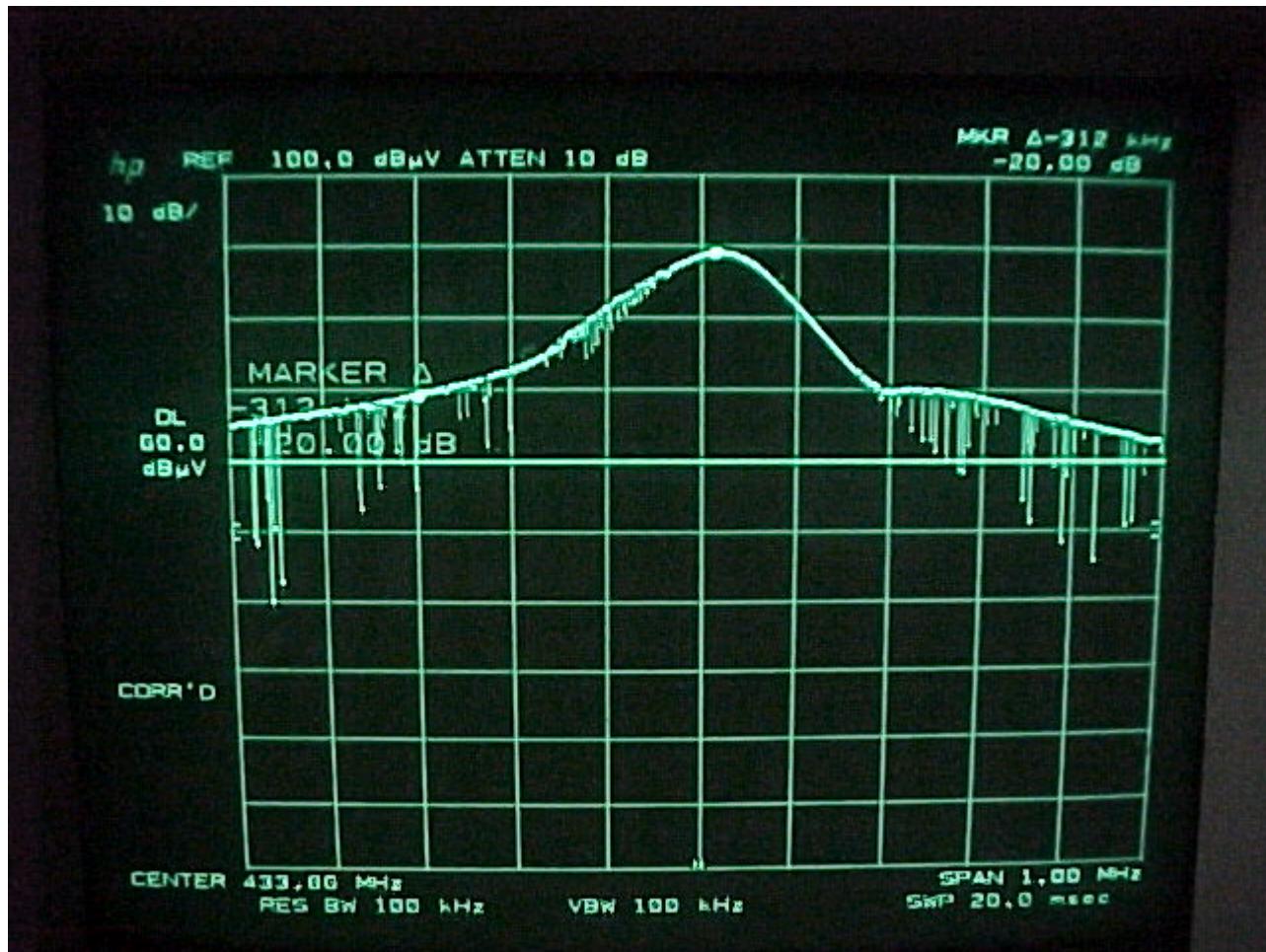
No spurious emissions found within the test frequency range



-20 dB BANDWIDTH

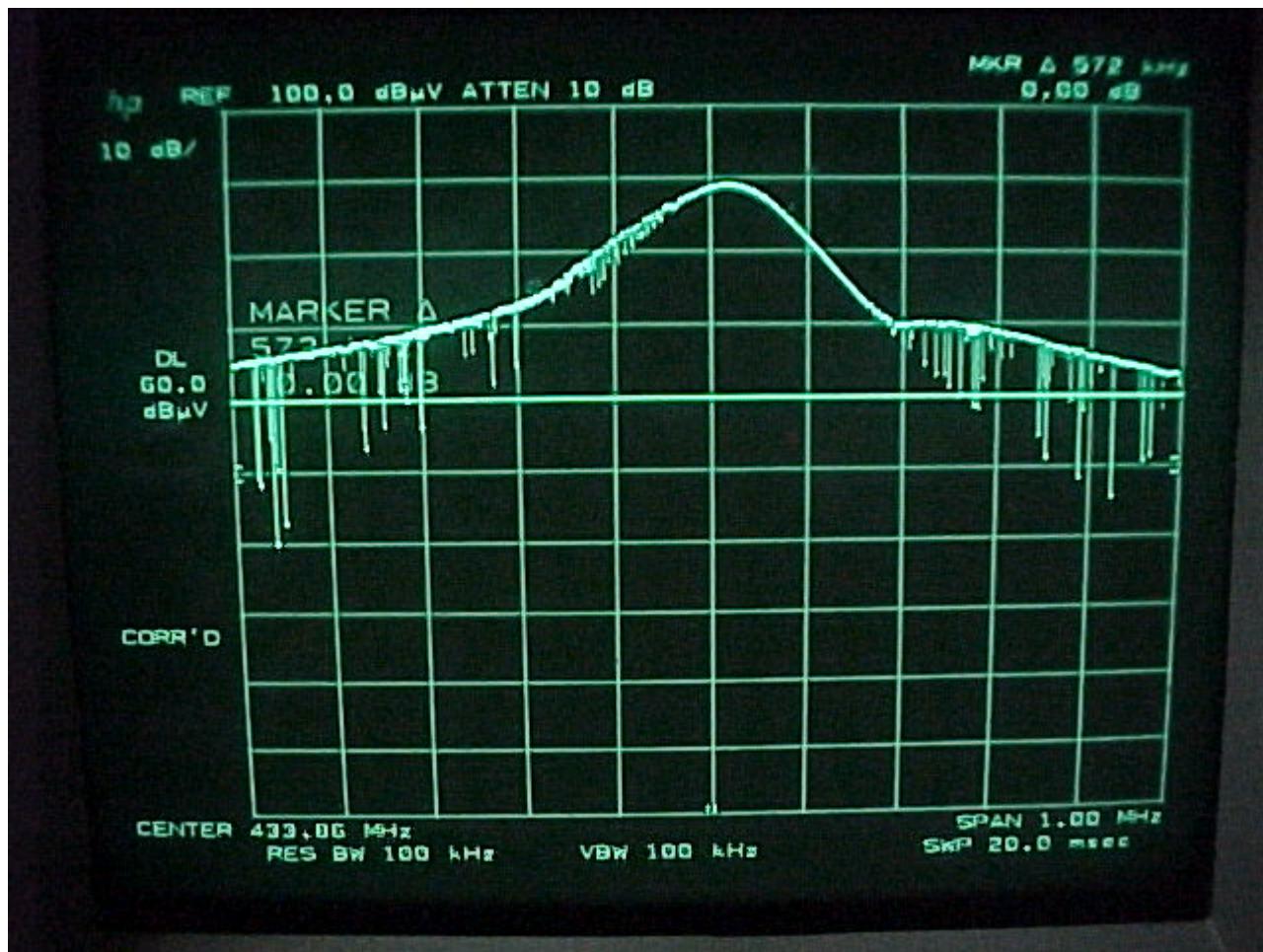
PHOTOGRAPHS





PHOTOGRAPH OF THE -20 dB BANDWIDTH 1 OF 2





PHOTOGRAPH OF THE -20 dB BANDWIDTH 2 OF 2

