

FCC PART 15, SUBPART B and C
TEST REPORT

for

LONG-RANGE HANDHELD TRANSMITTER

P/N: OTX-xxx-HH-LR8-MS

Prepared for

LINX TECHNOLOGIES
575 S.E. ASHLEY PLACE
GRANTS PASS, OREGON 97526Prepared by: 

KYLE FUJIMOTO

Approved by: 

BENIGNO CHAVEZ

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

DATE: MARCH 31, 2006

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	16	2	2	2	14	27	63

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 Radiated Emissions (Spurious and Harmonics) Test (continued)	14
7.3 Bandwidth of the Fundamental	15
8. CONCLUSIONS	16



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 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: Long-Range Handheld Transmitter
P/N: OTX-xxx-HH-LR8-MS
S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was not modified during the testing.

Manufacturer: Linx Technologies
575 S.E. Ashley Place
Grants Pass, Oregon 97526

Test Dates: March 1, 2, and 3, 2006

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: 2003

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

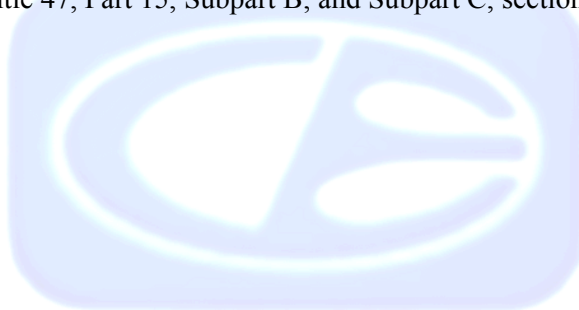
SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz	This test was not performed because the EUT operates on batteries only and cannot be plugged into the AC public mains.
2	Radiated RF Emissions, 10 kHz - 4400 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 [c].



1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Long-Range Handheld Transmitter P/N: OTX-xxx-HH-LR8-MS. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2003. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, 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

Linx Technologies

Paul True	President
Justin Hopper	Engineer
Ammon Gomez	Senior Product Engineer

Compatible Electronics, Inc.

Kyle Fujimoto	Test Engineer
Benigno Chavez	Test Engineer

2.4 Date Test Sample was Received

The test sample was received on March 1, 2006.

2.5 Disposition of the Test Sample

The test sample was has not been returned to Linx Technologies as of March 31, 2006.

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 Long-Range Handheld Transmitter P/N: OTX-xxx-HH-LR8-MS (EUT) was tested as a stand alone unit and tested in three orthogonal axis. The EUT was continuously transmitting.

The antenna is directly connected to the PCB via a screw.

After the transmitter is activated by pressing the button, the transmission will cease operation once the button is released.

The EUT comes in three different versions, the 315 MHz version, the 418 MHz version, and the 433.92 MHz version.

Each version of the transmitter was tested separately.

The final radiated data was taken in the modes 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	PART NUMBER	FCC ID
LONG-RANGE HANDHELD TRANSMITTER (EUT)	LINX TECHNOLOGIES	PCB-OTX-HH-LRMSHS	OTX- XXX-HH- LR8-MS	OJM-OTX-XXX-LRMSA



5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	June 10, 2005	June 10, 2006
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22279	June 10, 2005	June 10, 2006
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	June 11, 2005	June 11, 2006
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100172	October 28, 2004	October 28, 2006
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Radiated Emissions Data Capture Program	Compatible Electronics	2.0	N/A	N/A	N/A
Preamplifier	Com Power	PA-103	1582	January 19, 2006	Jan. 19, 2007
Biconical Antenna	Com Power	AB-900	15250	March 11, 2005	March 11, 2006
Log Periodic Antenna	Com Power	AL-100	16247	August 22, 2005	Aug. 22, 2006
Loop Antenna	Com Power	AL-130	17089	September 21, 2005	Sept. 21, 2006
Horn Antenna	Com Power	AH-118	10067	July 27, 2004	July 27, 2006
Microwave Preamplifier	Com Power	PA-122	181917	January 20, 2006	Jan. 20, 2007
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A



6. TEST SITE DESCRIPTION

6.1 Test Facility Description

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

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.



7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 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
9 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 4.40 GHz	1 MHz	Horn Antenna

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4: 2003. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. 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.



7.2 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.

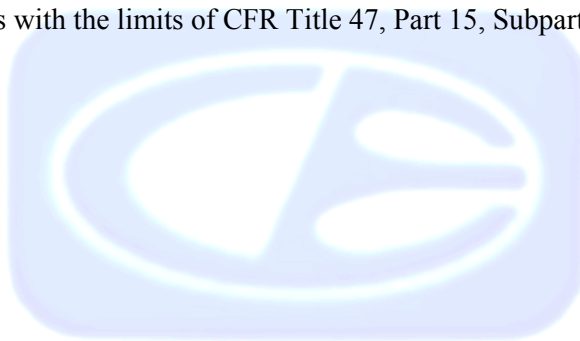


7.3 Bandwidth of the Fundamental

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the EUT. Data sheets 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 Long-Range Handheld Transmitter P/N: OTX-xxx-HH-LR8-MS 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.

No Modifications were made to the EUT.



APPENDIX C

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



ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Long-Range Handheld Transmitter
P/N: OTX-xxx-HH-LR8-MS
S/N: N/A

There were no additional models covered under this report.



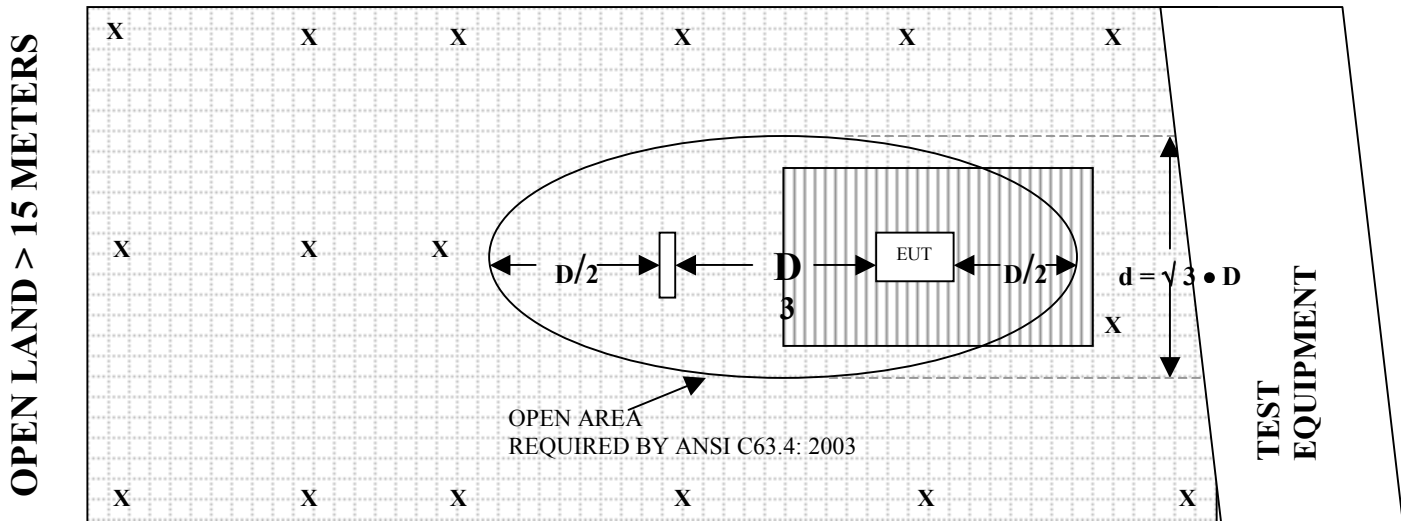
APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS



FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED TEST SITE

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

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



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 PA-103**PREAMPLIFIER**

S/N: 1582

CALIBRATION DATE: JANUARY 19, 2006

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	32.7	300	32.4
40	32.6	350	32.4
50	32.6	400	32.1
60	32.8	450	32.1
70	32.7	500	31.8
80	32.7	550	31.8
90	32.7	600	32.0
100	32.6	650	31.9
125	32.6	700	31.5
150	32.5	750	31.7
175	32.4	800	31.4
200	32.5	850	31.6
225	32.5	900	30.8
250	32.3	950	31.1
275	32.4	1000	30.9



COM-POWER PA-122**PREAMPLIFIER**

S/N: 181917

CALIBRATION DATE: JANUARY 20, 2006

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	34.697	10.0	36.558
1.5	33.817	10.5	35.048
2.0	33.587	11.0	33.258
2.5	33.804	11.5	32.960
3.0	33.850	12.0	33.312
3.5	33.943	12.5	33.836
4.0	34.399	13.0	34.178
4.5	34.847	13.5	34.197
5.0	35.172	14.0	33.769
5.5	35.383	14.5	33.392
6.0	35.539	15.0	33.387
6.5	34.802	15.5	34.038
7.0	33.793	16.0	34.884
7.5	33.511	16.5	35.740
8.0	33.910	17.0	35.341
8.5	34.907	17.5	34.729
9.0	36.036	18.0	33.760
9.5	36.661		



COM POWER AH-118

HORN ANTENNA

S/N: 10067

CALIBRATION DATE: JULY 27, 2004

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	25.0	10.0	37.8
1.5	27.9	10.5	39.4
2.0	31.5	11.0	39.4
2.5	31.1	11.5	40.6
3.0	30.6	12.0	40.8
3.5	30.5	12.5	40.5
4.0	30.6	13.0	41.2
4.5	31.4	13.5	42.0
5.0	33.7	14.0	43.1
5.5	33.8	14.5	43.4
6.0	34.7	15.0	39.2
6.5	35.0	15.5	38.8
7.0	35.9	16.0	40.1
7.5	38.1	16.5	40.2
8.0	38.2	17.0	43.4
8.5	37.7	17.5	46.6
9.0	37.7	18.0	45.8
9.5	38.4		



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

S/N: 17089

CALIBRATION DATE: SEPTEMBER 21, 2005

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-42.84	8.66
0.01	-41.93	9.57
0.02	-41.29	10.21
0.05	-42.37	9.13
0.07	-41.8	9.7
0.1	-41.83	9.67
0.2	-44.13	7.37
0.3	-41.73	9.77
0.5	-41.8	9.7
0.7	-41.53	9.97
1	-41.46	10.04
2	-41.14	10.36
3	-41.26	10.24
4	-41.46	10.04
5	-41.10	10.40
10	-40.83	10.67
15	-41.47	10.03
20	-35.44	16.06
25	-42.37	9.13
30	-42.94	8.56





FRONT VIEW

LINX TECHNOLOGIES
LONG-RANGE HANDHELD TRANSMITTER
P/N: OTX-xxx-HH-LR8-MS
FCC SUBPART B AND C – RADIATED EMISSIONS

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





REAR VIEW

LINX TECHNOLOGIES
LONG-RANGE HANDHELD TRANSMITTER
P/N: OTX-xxx-HH-LR8-MS
FCC SUBPART B AND C – RADIATED EMISSIONS

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





FRONT VIEW

LINX TECHNOLOGIES
LONG-RANGE HANDHELD TRANSMITTER
P/N: OTX-xxx-HH-LR8-MS
FCC SUBPART B AND C – RADIATED EMISSIONS

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





REAR VIEW

LINX TECHNOLOGIES
LONG-RANGE HANDHELD TRANSMITTER
P/N: OTX-xxx-HH-LR8-MS
FCC SUBPART B AND C – RADIATED EMISSIONS

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





FRONT VIEW

LINX TECHNOLOGIES
LONG-RANGE HANDHELD TRANSMITTER
P/N: OTX-xxx-HH-LR8-MS
FCC SUBPART B AND C – RADIATED EMISSIONS

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





REAR VIEW

LINX TECHNOLOGIES
LONG-RANGE HANDHELD TRANSMITTER
P/N: OTX-xxx-HH-LR8-MS
FCC SUBPART B AND C – RADIATED EMISSIONS

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



APPENDIX E

DATA SHEETS



RADIATED EMISSIONS

DATA SHEETS



FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

315 MHz Version - X Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	72.12	V	95.62	-23.5	Peak	1	0	
315	65.8	V	75.62	-9.82	Avg	1	0	The Limit at 315 MHz
								is determined by
630	39.26	V	75.62	-36.36	Peak	1	90	using the formula
630	32.94	V	55.62	-22.68	Avg	1	90	show in Table 4, Note 1
								"For 260-470 MHz"
945	36.01	V	75.62	-39.61	Peak	1	90	of RSS-210, Issue 6
945	29.69	V	55.62	-25.93	Avg	1	90	
								FS (uv/m) = 41.67X F-7083
1260	36.63	V	75.62	-38.99	Peak	2.48	180	FS (uv/m) = 41.67 X 315-7083
1260	30.31	V	55.62	-25.31	Avg	2.48	180	FS (uv/m) = 13126.05-7083
								FS (uv/m) = 6043.05
1575	43.32	V	74	-30.68	Peak	1.45	45	FS (dBuV/m) = 75.62
1575	37	V	54	-17	Avg	1.45	45	
1890	42.56	V	75.62	-33.06	Peak	2.4	180	
1890	36.24	V	55.62	-19.38	Avg	2.4	180	
2205	42.11	V	74	-31.89	Peak	1.32	315	
2205	35.79	V	54	-18.21	Avg	1.32	315	
2520	42.9	V	75.62	-32.72	Peak	2.31	315	
2520	36.58	V	55.62	-19.04	Avg	2.31	315	
2835	42.31	V	74	-31.69	Peak	1.71	180	
2835	35.99	V	54	-18.01	Avg	1.71	180	
3150	42.32	V	75.62	-33.3	Peak	1.71	225	
3150	36	V	55.62	-19.62	Avg	1.71	225	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

315 MHz Version - X Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	81.91	H	95.62	-13.71	Peak	1	90	
315	75.59	H	75.62	-0.03	Avg	1	90	
630	49.71	H	75.62	-25.91	Peak	1	90	
630	43.39	H	55.62	-12.23	Avg	1	90	
945	48.16	H	75.62	-27.46	Peak	1	90	
945	41.84	H	55.62	-13.78	Avg	1	90	
1260	35.82	H	75.62	-39.8	Peak	2.3	225	
1260	29.5	H	55.62	-26.12	Avg	2.3	225	
1575	42.81	H	74	-31.19	Peak	2.32	225	
1575	36.49	H	54	-17.51	Avg	2.32	225	
1890	43.12	H	75.62	-32.5	Peak	2.42	225	
1890	36.8	H	55.62	-18.82	Avg	2.42	225	
2205	43.54	H	74	-30.46	Peak	1.56	180	
2205	37.22	H	54	-16.78	Avg	1.56	180	
2520	41.89	H	75.62	-33.73	Peak	2.52	180	
2520	35.57	H	55.62	-20.05	Avg	2.52	180	
2835	42.15	H	74	-31.85	Peak	1.57	180	
2835	35.83	H	54	-18.17	Avg	1.57	180	
3150	42.11	H	75.62	-33.51	Peak	2.16	180	
3150	35.79	H	55.62	-19.83	Avg	2.6	180	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

315 MHz Version - Y Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	81.71	V	95.62	-13.91	Peak	1.5	225	
315	75.39	V	75.62	-0.23	Avg	1.5	225	
630	46.81	V	75.62	-28.81	Peak	1	90	
630	40.49	V	55.62	-15.13	Avg	1	90	
945	42.26	V	75.62	-33.36	Peak	1	180	
945	35.94	V	55.62	-19.68	Avg	1	180	
1260	36.76	V	75.62	-38.86	Peak	2.46	225	
1260	30.44	V	55.62	-25.18	Avg	2.46	225	
1575	44.98	V	74	-29.02	Peak	1.64	225	
1575	38.66	V	54	-15.34	Avg	1.64	225	
1890	46.43	V	75.62	-29.19	Peak	2.51	225	
1890	40.11	V	55.62	-15.51	Avg	2.51	225	
2205	43.7	V	74	-30.3	Peak	2.51	225	
2205	37.38	V	54	-16.62	Avg	2.51	225	
2520	43.53	V	75.62	-32.09	Peak	1.71	225	
2520	37.21	V	55.62	-18.41	Avg	1.71	225	
2835	43.61	V	74	-30.39	Peak	2.37	180	
2835	37.29	V	54	-16.71	Avg	2.37	180	
3150	43.77	V	75.62	-31.85	Peak	1.79	0	
3150	37.45	V	55.62	-18.17	Avg	1.79	0	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

315 MHz Version - Y Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	71.82	H	95.62	-23.8	Peak	1	180	
315	65.5	H	75.62	-10.12	Avg	1	180	
630	35.71	H	75.62	-39.91	Peak	1	90	
630	29.39	H	55.62	-26.23	Avg	1	90	
945	36.36	H	75.62	-39.26	Peak	1	180	
945	30.04	H	55.62	-25.58	Avg	1	180	
1260	35.62	H	75.62	-40	Peak	2.19	225	
1260	29.3	H	55.62	-26.32	Avg	2.19	225	
1575	38.17	H	74	-35.83	Peak	2.27	180	
1575	31.85	H	54	-22.15	Avg	2.27	180	
1890	41.2	H	75.62	-34.42	Peak	1.74	180	
1890	34.88	H	55.62	-20.74	Avg	1.74	180	
2205	42.64	H	74	-31.36	Peak	1.74	180	
2205	36.32	H	54	-17.68	Avg	1.74	180	
2520	45.11	H	75.62	-30.51	Peak	2.47	225	
2520	38.79	H	55.62	-16.83	Avg	2.47	225	
2835	43.61	H	74	-30.39	Peak	1.52	225	
2835	37.29	H	54	-16.71	Avg	1.52	225	
3150	42.96	H	75.62	-32.66	Peak	1.52	225	
3150	36.64	H	55.62	-18.98	Avg	1.52	225	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

315 MHz Version - Z Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	74.71	V	95.62	-20.91	Peak	1	90	
315	68.39	V	75.62	-7.23	Avg	1	90	
630	38.21	V	75.62	-37.41	Peak	1	225	
630	31.89	V	55.62	-23.73	Avg	1	225	
945	38.16	V	75.62	-37.46	Peak	1	225	
945	31.84	V	55.62	-23.78	Avg	1	225	
1260	35.26	V	75.62	-40.36	Peak	1.65	180	
1260	28.94	V	55.62	-26.68	Avg	1.65	180	
1575	39.98	V	74	-34.02	Peak	2.19	225	
1575	33.66	V	54	-20.34	Avg	2.19	225	
1890	41.56	V	75.62	-34.06	Peak	1.61	180	
1890	35.24	V	55.62	-20.38	Avg	1.61	180	
2205	44.26	V	74	-29.74	Peak	2.23	180	
2205	37.94	V	54	-16.06	Avg	2.23	180	
2520	43.15	V	75.62	-32.47	Peak	1.91	225	
2520	36.83	V	55.62	-18.79	Avg	1.91	225	
2835	43.78	V	74	-30.22	Peak	2.23	180	
2835	37.46	V	54	-16.54	Avg	2.23	180	
3150	44.15	V	75.62	-31.47	Peak	2.23	180	
3150	37.83	V	55.62	-17.79	Avg	2.23	180	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

315 MHz Version - Z Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
315	81.61	H	95.62	-14.01	Peak	1	90	
315	75.29	H	75.62	-0.33	Avg	1	90	
630	47.61	H	75.62	-28.01	Peak	1	270	
630	41.29	H	55.62	-14.33	Avg	1	270	
945	44.36	H	75.62	-31.26	Peak	1	270	
945	38.04	H	55.62	-17.58	Avg	1	270	
1260	35.07	H	75.62	-40.55	Peak	2.25	180	
1260	28.75	H	55.62	-26.87	Avg	2.25	180	
1575	43.78	H	74	-30.22	Peak	2.39	180	
1575	37.46	H	54	-16.54	Avg	2.39	180	
1890	43.35	H	75.62	-32.27	Peak	2.25	180	
1890	37.03	H	55.62	-18.59	Avg	2.25	180	
2205	42.05	H	74	-31.95	Peak	1.74	225	
2205	35.73	H	54	-18.27	Avg	1.74	225	
2520	42.03	H	75.62	-33.59	Peak	2.13	225	
2520	35.71	H	55.62	-19.91	Avg	2.13	225	
2835	42.25	H	74	-31.75	Peak	2.13	225	
2835	35.93	H	54	-18.07	Avg	2.13	225	
3150	42.06	H	75.62	-33.56	Peak	1.6	315	
3150	35.74	H	55.62	-19.88	Avg	1.6	315	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

418 MHz Version - X Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	76.54	V	100.28	-23.74	Peak	2.5	180	
418	70.22	V	80.28	-10.06	Avg	2.5	180	
836	41	V	80.28	-39.28	Peak	1	90	
836	34.68	V	60.28	-25.6	Avg	1	90	
1254	36.82	V	80.28	-43.46	Peak	2.42	180	
1254	30.5	V	60.28	-29.78	Avg	2.42	180	
1672	45.18	V	74	-28.82	Peak	2.07	180	
1672	38.86	V	54	-15.14	Avg	2.07	180	
2090	43.47	V	80.28	-36.81	Peak	1.22	90	
2090	37.15	V	60.28	-23.13	Avg	1.22	90	
2508	40.8	V	80.28	-39.48	Peak	2.15	90	
2508	34.48	V	60.28	-25.8	Avg	2.15	90	
2926	42.26	V	80.28	-38.02	Peak	1.51	180	
2926	35.94	V	60.28	-24.34	Avg	1.51	180	
3344	44.56	V	80.28	-35.72	Peak	2.07	180	
3344	38.24	V	60.28	-22.04	Avg	2.07	180	
3762	42.77	V	74	-31.23	Peak	1.48	180	
3762	36.45	V	54	-17.55	Avg	1.48	180	
4180	45.4	V	74	-28.6	Peak	1.48	90	
4180	39.08	V	54	-14.92	Avg	1.48	90	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

418 MHz Version - X Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	86.14	H	100.28	-14.14	Peak	1	45	
418	79.82	H	80.28	-0.46	Avg	1	45	
836	48.99	H	80.28	-31.29	Peak	1	90	
836	42.67	H	60.28	-17.61	Avg	1	90	
1254	35.89	H	80.28	-44.39	Peak	2.49	180	
1254	29.57	H	60.28	-30.71	Avg	2.49	180	
1672	49.5	H	74	-24.5	Peak	1.2	270	
1672	43.18	H	54	-10.82	Avg	1.2	270	
2090	45.22	H	80.28	-35.06	Peak	2.64	90	
2090	38.9	H	60.28	-21.38	Avg	2.64	90	
2508	42.09	H	80.28	-38.19	Peak	2	180	
2508	35.77	H	60.28	-24.51	Avg	2	180	
2926	41.15	H	80.28	-39.13	Peak	2.43	180	
2926	34.83	H	60.28	-25.45	Avg	2.43	180	
3344	42.18	H	80.28	-38.1	Peak	2.43	225	
3344	35.86	H	60.28	-24.42	Avg	2.43	225	
3762	42.6	H	74	-31.4	Peak	1.74	225	
3762	36.28	H	54	-17.72	Avg	1.74	225	
4180	43.27	H	74	-30.73	Peak	1.74	225	
4180	36.95	H	54	-17.05	Avg	1.74	225	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

418 MHz Version - Y Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	85.44	V	100.28	-14.84	Peak	1	45	
418	79.12	V	80.28	-1.16	Avg	1	45	
836	52.7	V	80.28	-27.58	Peak	1	90	
836	46.38	V	60.28	-13.9	Avg	1	90	
1254	37.45	V	80.28	-42.83	Peak	2.58	225	
1254	31.13	V	60.28	-29.15	Avg	2.58	225	
1672	51.96	V	74	-22.04	Peak	2.19	225	
1672	45.64	V	54	-8.36	Avg	2.19	225	
2090	43.42	V	80.28	-36.86	Peak	2.48	90	
2090	37.1	V	60.28	-23.18	Avg	2.48	90	
2508	41.86	V	80.28	-38.42	Peak	1.81	180	
2508	35.54	V	60.28	-24.74	Avg	1.81	180	
2926	42.3	V	80.28	-37.98	Peak	2.56	270	
2926	35.98	V	60.28	-24.3	Avg	2.56	270	
3344	44.36	V	80.28	-35.92	Peak	1.81	180	
3344	38.04	V	60.28	-22.24	Avg	1.81	180	
3762	42.4	V	74	-31.6	Peak	1.33	180	
3762	36.08	V	54	-17.92	Avg	1.33	180	
4180	44.13	V	74	-29.87	Peak	1.33	180	
4180	37.81	V	54	-16.19	Avg	1.33	180	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

418 MHz Version - Y Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	71.44	H	100.28	-28.84	Peak	1	180	
418	65.12	H	80.28	-15.16	Avg	1	180	
836	39.3	H	80.28	-40.98	Peak	1	180	
836	32.98	H	60.28	-27.3	Avg	1	180	
1254	34.35	H	80.28	-45.93	Peak	1.71	225	
1254	28.03	H	60.28	-32.25	Avg	1.71	225	
1672	42.24	H	74	-31.76	Peak	2.58	135	
1672	35.92	H	54	-18.08	Avg	2.58	135	
2090	45.14	H	80.28	-35.14	Peak	1.67	225	
2090	38.82	H	60.28	-21.46	Avg	1.67	225	
2508	41.57	H	80.28	-38.71	Peak	2.54	225	
2508	35.25	H	60.28	-25.03	Avg	2.54	225	
2926	42.36	H	80.28	-37.92	Peak	2.54	180	
2926	36.04	H	60.28	-24.24	Avg	2.54	180	
3344	44.37	H	80.28	-35.91	Peak	1.79	225	
3344	38.05	H	60.28	-22.23	Avg	1.79	225	
3762	44.5	H	74	-29.5	Peak	1.6	225	
3762	38.18	H	54	-15.82	Avg	1.6	225	
4180	43.67	H	74	-30.33	Peak	1.6	225	
4180	37.35	H	54	-16.65	Avg	1.6	225	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06

Labs: A and B

Tested By: Kyle F.

418 MHz Version - Z Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	78.04	V	100.28	-22.24	Peak	1	90	
418	71.72	V	80.28	-8.56	Avg	1	90	
836	42.1	V	80.28	-38.18	Peak	1	225	
836	35.78	V	60.28	-24.5	Avg	1	225	
1254	35.7	V	80.28	-44.58	Peak	1.75	225	
1254	29.38	V	60.28	-30.9	Avg	1.75	225	
1672	47.35	V	74	-26.65	Peak	2.77	90	
1672	41.03	V	54	-12.97	Avg	2.77	90	
2090	45.8	V	80.28	-34.48	Peak	2.83	45	
2090	39.48	V	60.28	-20.8	Avg	2.83	45	
2508	41.66	V	80.28	-38.62	Peak	1.97	45	
2508	35.34	V	60.28	-24.94	Avg	1.97	45	
2926	41.76	V	80.28	-38.52	Peak	1.45	180	
2926	35.44	V	60.28	-24.84	Avg	1.45	180	
3344	43.52	V	80.28	-36.76	Peak	1.81	225	
3344	37.2	V	60.28	-23.08	Avg	1.81	225	
3762	42.4	V	74	-31.6	Peak	2.54	90	
3762	36.08	V	54	-17.92	Avg	2.54	90	
4180	44.16	V	74	-29.84	Peak	1.82	225	
4180	37.84	V	54	-16.16	Avg	1.82	225	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

418 MHz Version - Z Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	86.24	H	100.28	-14.04	Peak	1	90	
418	79.92	H	80.28	-0.36	Avg	1	90	
836	51.8	H	80.28	-28.48	Peak	1	90	
836	45.48	H	60.28	-14.8	Avg	1	90	
1254	34.28	H	80.28	-46	Peak	1.6	225	
1254	27.96	H	60.28	-32.32	Avg	1.6	225	
1672	45.7	H	74	-28.3	Peak	1.97	225	
1672	39.38	H	54	-14.62	Avg	1.97	225	
2090	45.73	H	80.28	-34.55	Peak	2.66	180	
2090	39.41	H	60.28	-20.87	Avg	2.66	180	
2508	41.83	H	80.28	-38.45	Peak	2.11	180	
2508	35.51	H	60.28	-24.77	Avg	2.11	180	
2926	43.06	H	80.28	-37.22	Peak	2.86	225	
2926	36.74	H	60.28	-23.54	Avg	2.86	225	
3344	42.83	H	80.28	-37.45	Peak	1.76	225	
3344	36.51	H	60.28	-23.77	Avg	1.76	225	
3762	44.74	H	74	-29.26	Peak	1.63	180	
3762	38.42	H	54	-15.58	Avg	1.63	180	
4180	45.13	H	74	-28.87	Peak	1.49	225	
4180	38.81	H	54	-15.19	Avg	1.49	225	

Linux Technologies
Long-Range Handheld Transmitter
P/N: OTX-XXX-HH-LR8-MS

Date: 03/02/06
Labs: A and B
Tested By: Kyle F.

418 MHz Version - Spurious Emissions -- 10 kHz to 4180 MHz
X-Axis - Worst Case
With 2000 Ohm Reistor

[illegible]

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

433.92 MHz Version - X Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	76.2	V	100.82	-24.62	Peak	2	90	
433.92	69.88	V	80.82	-10.94	Avg	2	90	
867.84	41.19	V	80.82	-39.63	Peak	1	90	
867.84	34.87	V	60.82	-25.95	Avg	1	90	
1301.76	37.94	V	74	-36.06	Peak	2.56	180	
1301.76	31.62	V	54	-22.38	Avg	2.56	180	
1735.7	46.3	V	80.82	-34.52	Peak	2.68	225	
1735.7	39.98	V	60.82	-20.84	Avg	2.68	225	
2169.6	45.69	V	80.82	-35.13	Peak	1.59	225	
2169.6	39.37	V	60.82	-21.45	Avg	1.59	225	
2603.52	43.06	V	80.82	-37.76	Peak	1.59	225	
2603.52	36.74	V	60.82	-24.08	Avg	1.59	225	
3037.44	41.41	V	80.82	-39.41	Peak	1.83	90	
3037.44	35.09	V	60.82	-25.73	Avg	1.83	90	
3471.36	42.95	V	80.82	-37.87	Peak	1.83	90	
3471.36	36.63	V	60.82	-24.19	Avg	1.83	90	
3905.28	43.41	V	74	-30.59	Peak	1.61	180	
3905.28	37.09	V	54	-16.91	Avg	1.61	180	
4339.2	45.65	V	74	-28.35	Peak	1.49	180	
4339.2	33.85	V	54	-20.15	Avg	1.49	180	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

433.92 MHz Version - X Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	87.1	H	100.82	-13.72	Peak	1	90	
433.92	80.78	H	80.82	-0.04	Avg	1	90	
867.84	52.89	H	80.82	-27.93	Peak	1	90	
867.84	46.57	H	60.82	-14.25	Avg	1	90	
1301.76	36.49	H	74	-37.51	Peak	2.43	180	
1301.76	30.17	H	54	-23.83	Avg	2.43	180	
1735.7	49.13	H	80.82	-31.69	Peak	2.61	225	
1735.7	42.81	H	60.82	-18.01	Avg	2.61	225	
2169.6	44.26	H	80.82	-36.56	Peak	2.61	180	
2169.6	37.94	H	60.82	-22.88	Avg	2.61	180	
2603.52	41.08	H	80.82	-39.74	Peak	1.61	225	
2603.52	34.76	H	60.82	-26.06	Avg	1.61	225	
3037.44	42.39	H	80.82	-38.43	Peak	2.15	180	
3037.44	36.07	H	60.82	-24.75	Avg	2.15	180	
3471.36	42.89	H	80.82	-37.93	Peak	1.79	315	
3471.36	36.57	H	60.82	-24.25	Avg	1.79	315	
3905.28	43.68	H	74	-30.32	Peak	1.79	225	
3905.28	37.36	H	54	-16.64	Avg	1.79	225	
4339.2	46.85	H	74	-27.15	Peak	1.79	225	
4339.2	40.53	H	54	-13.47	Avg	1.79	225	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

433.92 MHz Version - Y Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	86.9	V	100.82	-13.92	Peak	1	180	
433.92	80.58	V	80.82	-0.24	Avg	1	180	
867.84	50.52	V	80.82	-30.3	Peak	1	90	
867.84	44.2	V	60.82	-16.62	Avg	1	90	
1301.76	39.72	V	74	-34.28	Peak	1.66	225	
1301.76	33.4	V	54	-20.6	Avg	1.66	225	
1735.7	48.69	V	80.82	-32.13	Peak	2.78	180	
1735.7	42.37	V	60.82	-18.45	Avg	2.78	180	
2169.6	44.96	V	80.82	-35.86	Peak	2.31	225	
2169.6	38.64	V	60.82	-22.18	Avg	2.31	225	
2603.52	41.36	V	80.82	-39.46	Peak	1.51	180	
2603.52	35.04	V	60.82	-25.78	Avg	1.51	180	
3037.44	42.66	V	80.82	-38.16	Peak	1.51	180	
3037.44	36.34	V	60.82	-24.48	Avg	1.51	180	
3471.36	42.95	V	80.82	-37.87	Peak	1.27	180	
3471.36	36.63	V	60.82	-24.19	Avg	1.27	180	
3905.28	42.98	V	74	-31.02	Peak	1.96	135	
3905.28	36.66	V	54	-17.34	Avg	1.96	135	
4339.2	47.62	V	74	-26.38	Peak	1.42	180	
4339.2	41.3	V	54	-12.7	Avg	1.42	180	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

433.92 MHz Version - Y Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	74.4	H	100.82	-26.42	Peak	1	225	
433.92	68.08	H	80.82	-12.74	Avg	1	225	
867.84	41.49	H	80.82	-39.33	Peak	1	180	
867.84	35.17	H	60.82	-25.65	Avg	1	180	
1301.76	37.99	H	74	-36.01	Peak	2.39	225	
1301.76	31.67	H	54	-22.33	Avg	2.39	225	
1735.7	43.99	H	80.82	-36.83	Peak	2.24	135	
1735.7	37.67	H	60.82	-23.15	Avg	2.24	135	
2169.6	47	H	80.82	-33.82	Peak	2.32	225	
2169.6	40.68	H	60.82	-20.14	Avg	2.32	225	
2603.52	41.78	H	80.82	-39.04	Peak	1.76	180	
2603.52	35.46	H	60.82	-25.36	Avg	1.76	180	
3037.44	42.45	H	80.82	-38.37	Peak	2.77	180	
3037.44	36.13	H	60.82	-24.69	Avg	2.77	180	
3471.36	42.8	H	80.82	-38.02	Peak	1.77	90	
3471.36	36.48	H	60.82	-24.34	Avg	1.77	90	
3905.28	43.48	H	74	-30.52	Peak	1.65	90	
3905.28	37.16	H	54	-16.84	Avg	1.65	90	
4339.2	45.5	H	74	-28.5	Peak	1.94	180	
4339.2	39.18	H	54	-14.82	Avg	1.94	180	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

433.92 MHz Version - Z Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	72	V	100.82	-28.82	Peak	1.5	180	
433.92	65.68	V	80.82	-15.14	Avg	1.5	180	
867.84	41.79	V	80.82	-39.03	Peak	1	90	
867.84	35.47	V	60.82	-25.35	Avg	1	90	
1301.76	38.49	V	74	-35.51	Peak	2.82	180	
1301.76	32.17	V	54	-21.83	Avg	2.82	180	
1735.7	48.69	V	80.82	-32.13	Peak	2.58	180	
1735.7	42.37	V	60.82	-18.45	Avg	2.58	180	
2169.6	46.8	V	80.82	-34.02	Peak	1.54	180	
2169.6	40.48	V	60.82	-20.34	Avg	1.54	180	
2603.52	42.62	V	80.82	-38.2	Peak	2.17	180	
2603.52	36.3	V	60.82	-24.52	Avg	2.17	180	
3037.44	41.99	V	80.82	-38.83	Peak	1.63	225	
3037.44	35.67	V	60.82	-25.15	Avg	1.63	225	
3471.36	41.92	V	80.82	-38.9	Peak	1.63	315	
3471.36	35.6	V	60.82	-25.22	Avg	1.63	315	
3905.28	43.32	V	74	-30.68	Peak	1.63	45	
3905.28	37	V	54	-17	Avg	1.63	45	
4339.2	48.45	V	74	-25.55	Peak	2.47	180	
4339.2	42.13	V	54	-11.87	Avg	2.47	180	

FCC 15.231

Linx Technologies
 Long-Range Handheld Transmitter
 P/N: OTX-XXX-HH-LR8-MS

Date: 03/01/06
 Labs: A and B
 Tested By: Kyle F.

433.92 MHz Version - Z Axis

Duty Cycle: 48.3%

With 2000 Ohm Resistor

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	87	H	100.82	-13.82	Peak	1	90	
433.92	80.68	H	80.82	-0.14	Avg	1	90	
867.84	49.59	H	80.82	-31.23	Peak	1	180	
867.84	43.27	H	60.82	-17.55	Avg	1	180	
1301.76	35.71	H	74	-38.29	Peak	1.5	180	
1301.76	29.39	H	54	-24.61	Avg	1.5	180	
1735.7	52.1	H	80.82	-28.72	Peak	1.77	180	
1735.7	45.78	H	60.82	-15.04	Avg	1.77	180	
2169.6	46.04	H	80.82	-34.78	Peak	2.41	90	
2169.6	39.72	H	60.82	-21.1	Avg	2.41	90	
2603.52	41.2	H	80.82	-39.62	Peak	1.87	95	
2603.52	34.88	H	60.82	-25.94	Avg	1.87	95	
3037.44	43.06	H	80.82	-37.76	Peak	1.64	90	
3037.44	36.74	H	60.82	-24.08	Avg	1.64	90	
3471.36	43.55	H	80.82	-37.27	Peak	2.9	155	
3471.36	37.23	H	60.82	-23.59	Avg	2.9	155	
3905.28	43.6	H	74	-30.4	Peak	2.02	225	
3905.28	37.28	H	54	-16.72	Avg	2.02	225	
4339.2	46.02	H	74	-27.98	Peak	2.66	180	
4339.2	39.7	H	54	-14.3	Avg	2.66	180	

Linux Technologies
Long Range Handheld Transmitter
P/N: OTX-XXX-HH-LR8-MS

Date: 03/02/06
Labs: A and B
Tested By: Kyle F.

433.92 MHz Version - Spurious Emissions -- 10 kHz to 4400 MHz
X-Axis - Worst Case
With 2000 Ohm Reistor

[illegible]

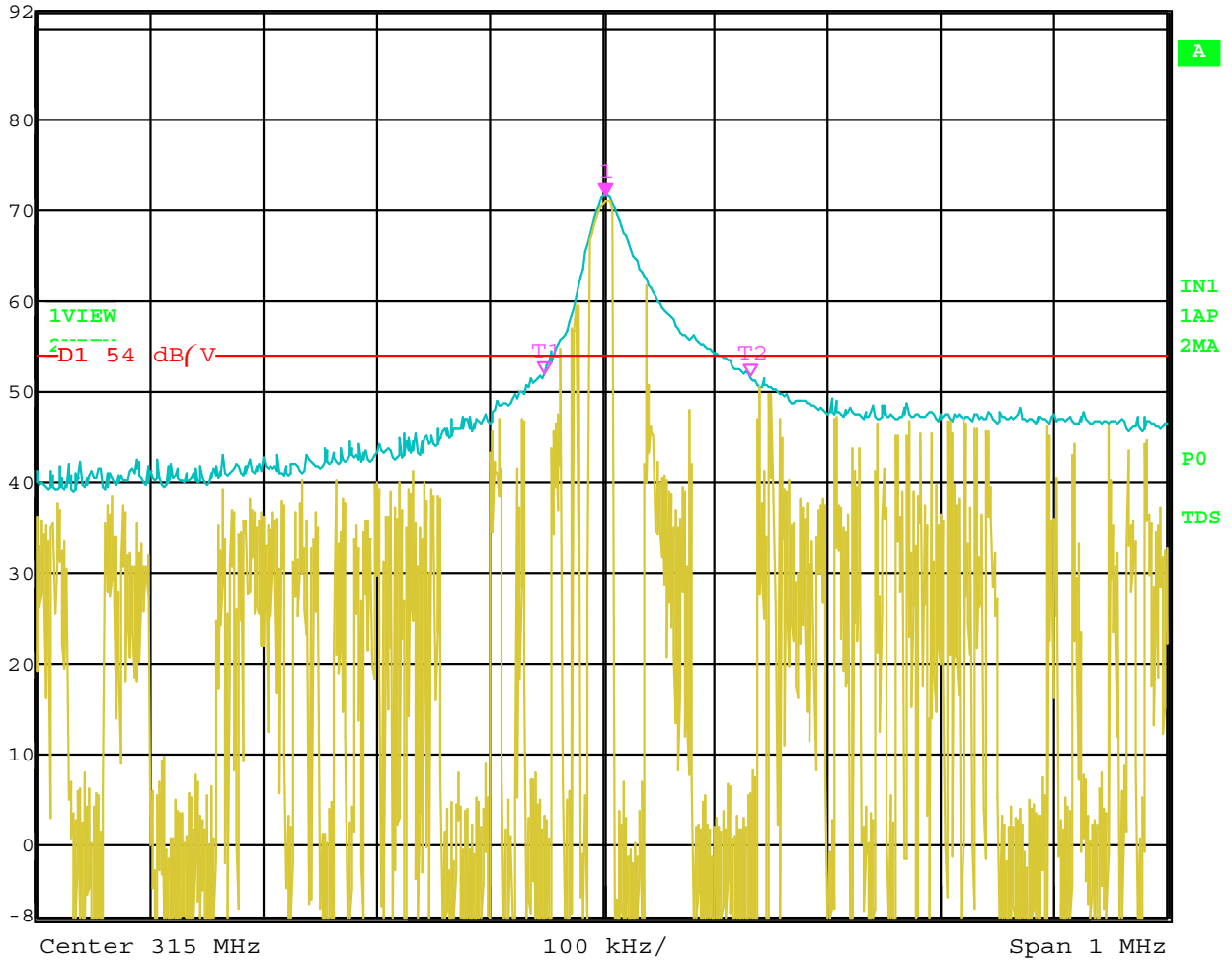
-20 dB BANDWIDTH

DATA SHEETS





Ref Lvl	Marker 1 [T2 ndB]	RBW	30 kHz	RF Att	10 dB
92 dB/V	ndB 20.00 dB	VBW	100 kHz		
	BW 182.36472946 kHz	SWT	5.5 ms	Unit	dB/V



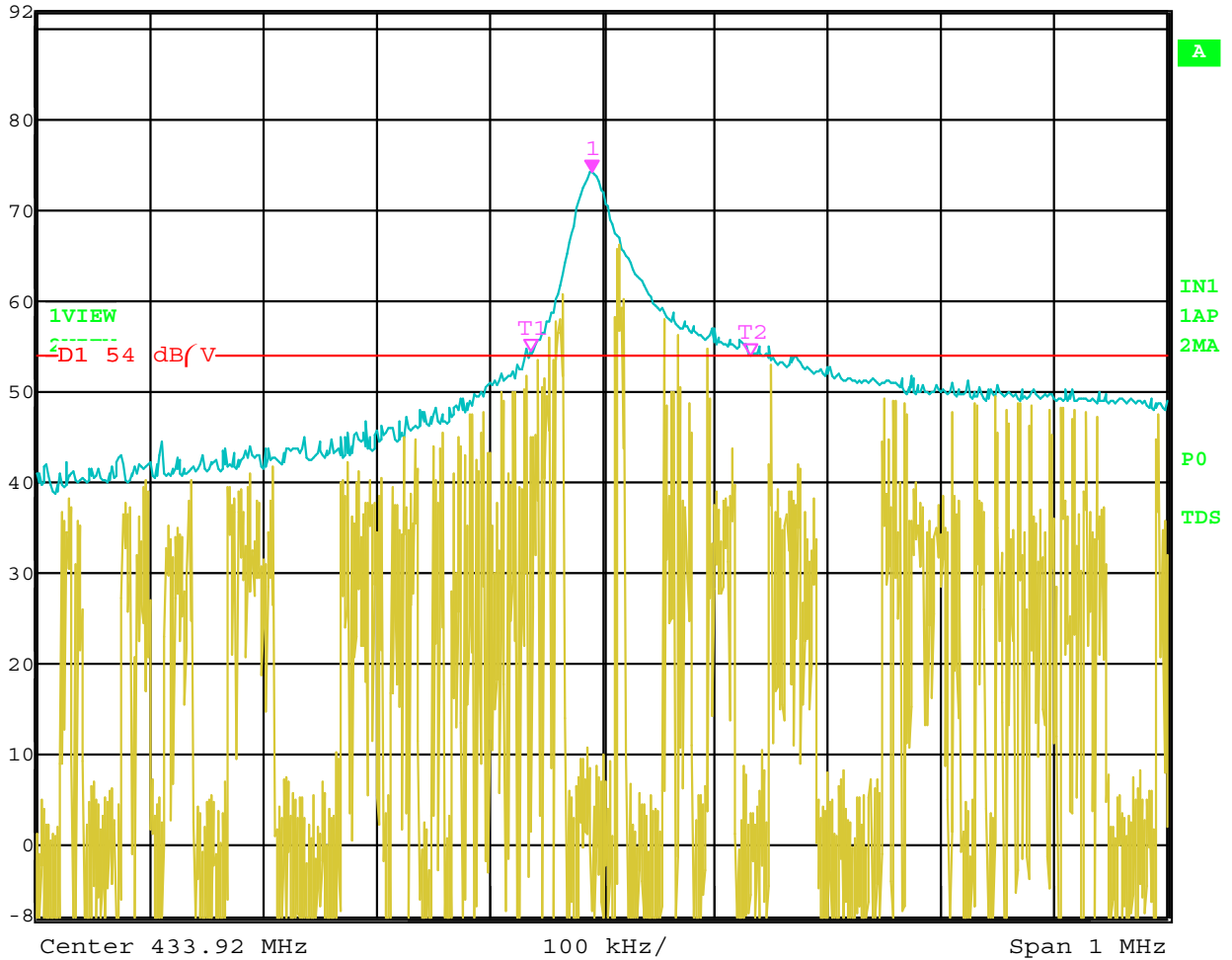
Date: 3.MAR.2006 09:13:37

-20 dB Bandwidth – 315 MHz Version





Ref Lvl	Marker 1 [T2 ndB]	RBW	30 kHz	RF Att	10 dB
92 dB/V	ndB 20.00 dB	VBW	100 kHz		
	BW 194.38877756 kHz	SWT	5.5 ms	Unit	dB/V



Date: 3.MAR.2006 09:16:01

-20 dB Bandwidth – 433.92 MHz Version

