

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

*for*

COMPACT HANDHELD TRANSMITTER

P/N: OTX-xxx-HH-CP8-MS

Prepared for

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

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DATE: MARCH 31, 2006

|       | REPORT<br>BODY | APPENDICES |          |          |          |          | TOTAL |
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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 endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested: Compact Handheld Transmitter  
P/N: OTX-xxx-HH-CP8-MS  
S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was modified during the testing. Please see the list located in Appendix B.

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

Test Dates: March 2, 3, and 13, 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.

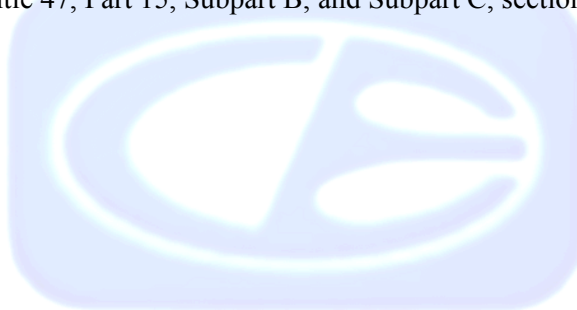
## SUMMARY OF TEST RESULTS

| 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 <b>Class B</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 Compact Handheld Transmitter P/N: OTX-xxx-HH-CP8-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,<br>Part 15 | FCC Rules – Radio frequency devices (including digital devices)                                                                      |
| ANSI C63.4:<br>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 Compact Handheld Transmitter P/N: OTX-xxx-HH-CP8-MS (EUT) was tested as a stand alone unit and tested in three orthogonal axis. The EUT was continuously transmitting.

The antenna is a PCB trace.

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<br>NUMBER   | PART<br>NUMBER        | FCC ID                   |
|------------------------------------------|----------------------|-------------------|-----------------------|--------------------------|
| COMPACT<br>HANDHELD<br>TRANSMITTER (EUT) | LINX<br>TECHNOLOGIES | PCB-OTX-HH-CPMSHS | OTX-XXX-<br>HH-CP8-MS | <b>OJM-OTX-XXX-CPMSA</b> |



## 5.2 EMI Test Equipment

| EQUIPMENT TYPE                                                | MANU-FACTURER          | MODEL NUMBER | SERIAL NUMBER | CALIBRATION DATE   | CALIBRATION DUE DATE |
|---------------------------------------------------------------|------------------------|--------------|---------------|--------------------|----------------------|
| <b>GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS</b> |                        |              |               |                    |                      |
| 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                  |
| <b>RF RADIATED EMISSIONS TEST EQUIPMENT</b>                   |                        |              |               |                    |                      |
| 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       |
| Biconical Antenna                                             | Com Power              | AB-900       | 15251         | March 9, 2006      | March 9, 2007        |
| 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.

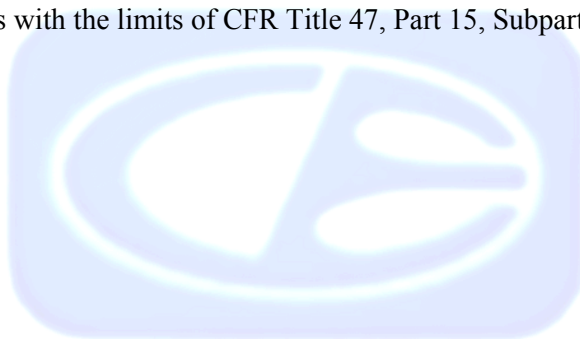


### 7.3 Bandwidth of the Fundamental

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 Compact Handheld Transmitter P/N: OTX-xxx-HH-CP8-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***



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## ***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:

- 1) Change R13 to 10 ohms on the 315 MHz version
- 2) Change R13 to 150ohms on the 418 MHz version
- 3) Change R13 to 180 ohms on the 433.92 MHz version





**APPENDIX C**

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



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

USED FOR THE PRIMARY TEST

Compact Handheld Transmitter  
P/N: OTX-xxx-HH-CP8-MS  
S/N: N/A

There were no additional models covered under this report.





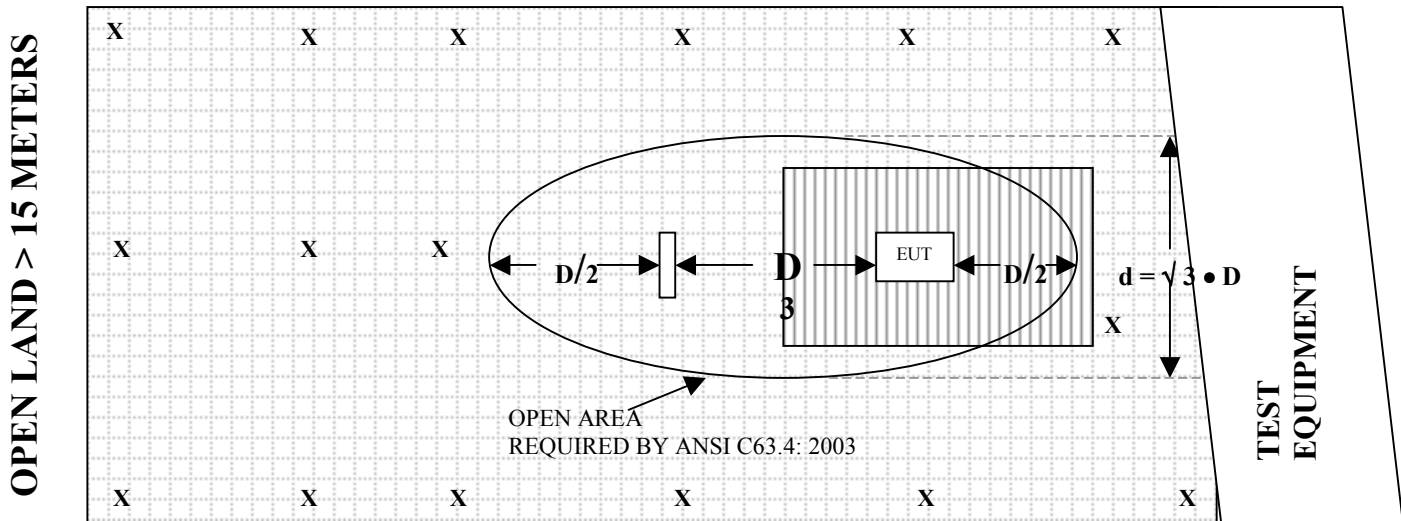
**APPENDIX D**

***DIAGRAMS, CHARTS, AND PHOTOS***



## FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED TEST SITE

### OPEN LAND > 15 METERS



### OPEN LAND > 15 METERS

|          |                          |  |                 |
|----------|--------------------------|--|-----------------|
| <b>X</b> | = GROUND RODS            |  | = GROUND SCREEN |
| <b>D</b> | = TEST DISTANCE (meters) |  | = WOOD COVER    |



COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: MARCH 11, 2005

| FREQUENCY<br>(MHz) | FACTOR<br>(dB) | FREQUENCY<br>(MHz) | FACTOR<br>(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 AB-900

BICONICAL ANTENNA

S/N: 15251

CALIBRATION DATE: MARCH 9, 2006

| FREQUENCY<br>(MHz) | FACTOR<br>(dB) | FREQUENCY<br>(MHz) | FACTOR<br>(dB) |
|--------------------|----------------|--------------------|----------------|
| 30                 | 11.27          | 120                | 13.04          |
| 35                 | 10.29          | 125                | 12.67          |
| 40                 | 9.72           | 140                | 11.91          |
| 45                 | 11.45          | 150                | 11.61          |
| 50                 | 13.34          | 160                | 13.67          |
| 60                 | 11.44          | 175                | 15.97          |
| 70                 | 8.41           | 180                | 16.64          |
| 80                 | 6.21           | 200                | 16.54          |
| 90                 | 7.50           | 250                | 16.96          |
| 100                | 11.65          | 300                | 17.48          |



COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16247

CALIBRATION DATE: AUGUST 22, 2005

| FREQUENCY<br>(MHz) | FACTOR<br>(dB) | FREQUENCY<br>(MHz) | FACTOR<br>(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

| <b>FREQUENCY<br/>(MHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(MHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 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

| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 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

| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 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

| <b>FREQUENCY<br/>(MHz)</b> | <b>MAGNETIC<br/>(dB/m)</b> | <b>ELECTRIC<br/>(dB/m)</b> |
|----------------------------|----------------------------|----------------------------|
| 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  
COMPACT HANDHELD TRANSMITTER  
P/N: OTX-xxx-HH-CP8-MS  
FCC SUBPART B AND C – RADIATED EMISSIONS

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





**REAR VIEW**

LINX TECHNOLOGIES  
COMPACT HANDHELD TRANSMITTER  
P/N: OTX-xxx-HH-CP8-MS  
FCC SUBPART B AND C – RADIATED EMISSIONS

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





**FRONT VIEW**

LINX TECHNOLOGIES  
COMPACT HANDHELD TRANSMITTER  
P/N: OTX-xxx-HH-CP8-MS  
FCC SUBPART B AND C – RADIATED EMISSIONS

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





**REAR VIEW**

LINX TECHNOLOGIES  
COMPACT HANDHELD TRANSMITTER  
P/N: OTX-xxx-HH-CP8-MS  
FCC SUBPART B AND C – RADIATED EMISSIONS

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





**FRONT VIEW**

LINX TECHNOLOGIES  
COMPACT HANDHELD TRANSMITTER  
P/N: OTX-xxx-HH-CP8-MS  
FCC SUBPART B AND C – RADIATED EMISSIONS

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





**REAR VIEW**

LINX TECHNOLOGIES  
COMPACT HANDHELD TRANSMITTER  
P/N: OTX-xxx-HH-CP8-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  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

Date: 03/13/06  
 Labs: A and B  
 Tested By: Kyle F.

**315 MHz Version - X Axis**

Duty Cycle: 48.3%

With 10 Ohm Resistor

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments                     |
|----------------|-----------------|-----------|-------|--------|-----------------------|-----------------------|-------------------------|------------------------------|
| 315            | 67.61           | V         | 95.62 | -28.01 | Peak                  | 1                     | 0                       |                              |
| 315            | 61.29           | V         | 75.62 | -14.33 | Avg                   | 1                     | 0                       | The Limit at 315 MHz         |
|                |                 |           |       |        |                       |                       |                         | is determined by             |
| 630            | 29.19           | V         | 75.62 | -46.43 | Peak                  | 1                     | 180                     | using the formula            |
| 630            | 22.87           | V         | 55.62 | -32.75 | Avg                   | 1                     | 180                     | show in Table 4, Note 1      |
|                |                 |           |       |        |                       |                       |                         | "For 260-470 MHz"            |
| 945            | 34.64           | V         | 75.62 | -40.98 | Peak                  | 1                     | 270                     | of RSS-210, Issue 6          |
| 945            | 28.32           | V         | 55.62 | -27.3  | Avg                   | 1                     | 270                     |                              |
|                |                 |           |       |        |                       |                       |                         | FS (uv/m) = 41.67X F-7083    |
| 1260           | 33.43           | V         | 75.62 | -42.19 | Peak                  | 1.29                  | 135                     | FS (uv/m) = 41.67 X 315-7083 |
| 1260           | 27.11           | V         | 55.62 | -28.51 | Avg                   | 1.29                  | 135                     | FS (uv/m) = 13126.05-7083    |
|                |                 |           |       |        |                       |                       |                         | FS (uv/m) = 6043.05          |
| 1575           | 41.09           | V         | 74    | -32.91 | Peak                  | 2.84                  | 135                     | FS (dBuV/m) = 75.62          |
| 1575           | 34.77           | V         | 54    | -19.23 | Avg                   | 2.84                  | 135                     |                              |
|                |                 |           |       |        |                       |                       |                         |                              |
| 1890           | 42.64           | V         | 75.62 | -32.98 | Peak                  | 1.42                  | 135                     |                              |
| 1890           | 36.32           | V         | 55.62 | -19.3  | Avg                   | 1.42                  | 135                     |                              |
|                |                 |           |       |        |                       |                       |                         |                              |
| 2205           | 44.79           | V         | 74    | -29.21 | Peak                  | 1.15                  | 135                     |                              |
| 2205           | 38.47           | V         | 54    | -15.53 | Avg                   | 1.15                  | 135                     |                              |
|                |                 |           |       |        |                       |                       |                         |                              |
| 2520           | 46.2            | V         | 75.62 | -29.42 | Peak                  | 1.86                  | 270                     |                              |
| 2520           | 39.88           | V         | 55.62 | -15.74 | Avg                   | 1.86                  | 270                     |                              |
|                |                 |           |       |        |                       |                       |                         |                              |
| 2835           | 44.07           | V         | 74    | -29.93 | Peak                  | 2.89                  | 315                     |                              |
| 2835           | 37.75           | V         | 54    | -16.25 | Avg                   | 2.89                  | 315                     |                              |
|                |                 |           |       |        |                       |                       |                         |                              |
| 3150           | 44.73           | V         | 75.62 | -30.89 | Peak                  | 1.61                  | 315                     |                              |
| 3150           | 38.41           | V         | 55.62 | -17.21 | Avg                   | 1.61                  | 315                     |                              |
|                |                 |           |       |        |                       |                       |                         |                              |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

Date: 03/13/06  
 Labs: A and B  
 Tested By: Kyle F.

**315 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 10 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|-------|--------|-----------------------|-----------------------|-------------------------|----------|
| 315            | 81.91           | H         | 95.62 | -13.71 | Peak                  | 1                     | 0                       |          |
| 315            | 75.59           | H         | 75.62 | -0.03  | Avg                   | 1                     | 0                       |          |
| 630            | 39.69           | H         | 75.62 | -35.93 | Peak                  | 1                     | 270                     |          |
| 630            | 33.37           | H         | 55.62 | -22.25 | Avg                   | 1                     | 270                     |          |
| 945            | 36.24           | H         | 75.62 | -39.38 | Peak                  | 1                     | 270                     |          |
| 945            | 29.92           | H         | 55.62 | -25.7  | Avg                   | 1                     | 270                     |          |
| 1260           | 33.19           | H         | 75.62 | -42.43 | Peak                  | 2.51                  | 135                     |          |
| 1260           | 26.87           | H         | 55.62 | -28.75 | Avg                   | 2.51                  | 135                     |          |
| 1575           | 43.32           | H         | 74    | -30.68 | Peak                  | 1.23                  | 135                     |          |
| 1575           | 37              | H         | 54    | -17    | Avg                   | 1.23                  | 135                     |          |
| 1890           | 45.12           | H         | 75.62 | -30.5  | Peak                  | 2.41                  | 135                     |          |
| 1890           | 38.8            | H         | 55.62 | -16.82 | Avg                   | 2.41                  | 135                     |          |
| 2205           | 44.46           | H         | 74    | -29.54 | Peak                  | 2.39                  | 135                     |          |
| 2205           | 38.14           | H         | 54    | -15.86 | Avg                   | 2.39                  | 135                     |          |
| 2520           | 50.05           | H         | 75.62 | -25.57 | Peak                  | 1.48                  | 135                     |          |
| 2520           | 43.73           | H         | 55.62 | -11.89 | Avg                   | 1.48                  | 135                     |          |
| 2835           | 43.42           | H         | 74    | -30.58 | Peak                  | 2.11                  | 135                     |          |
| 2835           | 37.1            | H         | 54    | -16.9  | Avg                   | 2.11                  | 135                     |          |
| 3150           | 40.35           | H         | 75.62 | -35.27 | Peak                  | 2.07                  | 135                     |          |
| 3150           | 34.03           | H         | 55.62 | -21.59 | Avg                   | 2.07                  | 135                     |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

Date: 03/13/06  
 Labs: A and B  
 Tested By: Kyle F.

**315 MHz Version - Y Axis**

Duty Cycle: 48.3%

**With 10 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|-------|--------|-----------------------|-----------------------|-------------------------|----------|
| 315            | 75.61           | V         | 95.62 | -20.01 | Peak                  | 1.5                   | 315                     |          |
| 315            | 69.29           | V         | 75.62 | -6.33  | Avg                   | 1.5                   | 315                     |          |
| 630            | 33.59           | V         | 75.62 | -42.03 | Peak                  | 1.5                   | 90                      |          |
| 630            | 27.27           | V         | 55.62 | -28.35 | Avg                   | 1.5                   | 90                      |          |
| 945            | 33.84           | V         | 75.62 | -41.78 | Peak                  | 1                     | 0                       |          |
| 945            | 27.52           | V         | 55.62 | -28.1  | Avg                   | 1                     | 0                       |          |
| 1260           | 34.32           | V         | 75.62 | -41.3  | Peak                  | 2.64                  | 180                     |          |
| 1260           | 28              | V         | 55.62 | -27.62 | Avg                   | 2.64                  | 180                     |          |
| 1575           | 43.42           | V         | 74    | -30.58 | Peak                  | 1.79                  | 135                     |          |
| 1575           | 37.1            | V         | 54    | -16.9  | Avg                   | 1.79                  | 135                     |          |
| 1890           | 45.96           | V         | 75.62 | -29.66 | Peak                  | 2.41                  | 0                       |          |
| 1890           | 39.64           | V         | 55.62 | -15.98 | Avg                   | 2.41                  | 0                       |          |
| 2205           | 51.01           | V         | 74    | -22.99 | Peak                  | 2.56                  | 180                     |          |
| 2205           | 44.69           | V         | 54    | -9.31  | Avg                   | 2.56                  | 180                     |          |
| 2520           | 50.4            | V         | 75.62 | -25.22 | Peak                  | 1.49                  | 45                      |          |
| 2520           | 44.08           | V         | 55.62 | -11.54 | Avg                   | 1.49                  | 45                      |          |
| 2835           | 48.59           | V         | 74    | -25.41 | Peak                  | 2.52                  | 180                     |          |
| 2835           | 42.27           | V         | 54    | -11.73 | Avg                   | 2.52                  | 180                     |          |
| 3150           | 43.29           | V         | 75.62 | -32.33 | Peak                  | 2.43                  | 315                     |          |
| 3150           | 36.97           | V         | 55.62 | -18.65 | Avg                   | 2.43                  | 315                     |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

Date: 03/13/06  
 Labs: A and B  
 Tested By: Kyle F.

**315 MHz Version - Y Axis**

Duty Cycle: 48.3%

**With 10 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|-------|--------|-----------------------|-----------------------|-------------------------|----------|
| 315            | 67.21           | H         | 95.62 | -28.41 | Peak                  | 2                     | 0                       |          |
| 315            | 60.89           | H         | 75.62 | -14.73 | Avg                   | 2                     | 0                       |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 630            | 28.99           | H         | 75.62 | -46.63 | Peak                  | 2                     | 0                       |          |
| 630            | 22.67           | H         | 55.62 | -32.95 | Avg                   | 2                     | 0                       |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 945            | 33.54           | H         | 75.62 | -42.08 | Peak                  | 1                     | 270                     |          |
| 945            | 27.22           | H         | 55.62 | -28.4  | Avg                   | 1                     | 270                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 1260           | 34.14           | H         | 75.62 | -41.48 | Peak                  | 2.23                  | 180                     |          |
| 1260           | 27.82           | H         | 55.62 | -27.8  | Avg                   | 2.23                  | 180                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 1575           | 38              | H         | 74    | -36    | Peak                  | 2.56                  | 180                     |          |
| 1575           | 31.68           | H         | 54    | -22.32 | Avg                   | 2.56                  | 180                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 1890           | 44.91           | H         | 75.62 | -30.71 | Peak                  | 2.79                  | 135                     |          |
| 1890           | 38.59           | H         | 55.62 | -17.03 | Avg                   | 2.79                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 2205           | 46.39           | H         | 74    | -27.61 | Peak                  | 2.73                  | 135                     |          |
| 2205           | 40.07           | H         | 54    | -13.93 | Avg                   | 2.73                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 2520           | 50.49           | H         | 75.62 | -25.13 | Peak                  | 2.59                  | 315                     |          |
| 2520           | 44.17           | H         | 55.62 | -11.45 | Avg                   | 2.59                  | 315                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 2835           | 49.34           | H         | 74    | -24.66 | Peak                  | 1.54                  | 135                     |          |
| 2835           | 43.02           | H         | 54    | -10.98 | Avg                   | 1.54                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 3150           | 46.94           | H         | 75.62 | -28.68 | Peak                  | 2.66                  | 135                     |          |
| 3150           | 40.62           | H         | 55.62 | -15    | Avg                   | 2.66                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

Date: 03/13/06  
 Labs: A and B  
 Tested By: Kyle F.

**315 MHz Version - Z Axis**

Duty Cycle: 48.3%

**With 10 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|-------|--------|-----------------------|-----------------------|-------------------------|----------|
| 315            | 74.51           | V         | 95.62 | -21.11 | Peak                  | 1.5                   | 315                     |          |
| 315            | 68.19           | V         | 75.62 | -7.43  | Avg                   | 1.5                   | 315                     |          |
| 630            | 27.49           | V         | 75.62 | -48.13 | Peak                  | 1                     | 270                     |          |
| 630            | 21.17           | V         | 55.62 | -34.45 | Avg                   | 1                     | 270                     |          |
| 945            | 34.24           | V         | 75.62 | -41.38 | Peak                  | 1                     | 270                     |          |
| 945            | 27.92           | V         | 55.62 | -27.7  | Avg                   | 1                     | 270                     |          |
| 1260           | 33.27           | V         | 75.62 | -42.35 | Peak                  | 2.43                  | 135                     |          |
| 1260           | 26.95           | V         | 55.62 | -28.67 | Avg                   | 2.43                  | 135                     |          |
| 1575           | 39.26           | V         | 74    | -34.74 | Peak                  | 1.46                  | 135                     |          |
| 1575           | 32.94           | V         | 54    | -21.06 | Avg                   | 1.46                  | 135                     |          |
| 1890           | 45.47           | V         | 75.62 | -30.15 | Peak                  | 2.71                  | 180                     |          |
| 1890           | 39.15           | V         | 55.62 | -16.47 | Avg                   | 2.71                  | 180                     |          |
| 2205           | 47.81           | V         | 74    | -26.19 | Peak                  | 2.12                  | 315                     |          |
| 2205           | 41.49           | V         | 54    | -12.51 | Avg                   | 2.12                  | 315                     |          |
| 2520           | 52.19           | V         | 75.62 | -23.43 | Peak                  | 1.57                  | 135                     |          |
| 2520           | 45.87           | V         | 55.62 | -9.75  | Avg                   | 1.57                  | 135                     |          |
| 2835           | 47.69           | V         | 74    | -26.31 | Peak                  | 1.63                  | 135                     |          |
| 2835           | 41.37           | V         | 54    | -12.63 | Avg                   | 1.63                  | 135                     |          |
| 3150           | 46.46           | V         | 75.62 | -29.16 | Peak                  | 3.05                  | 180                     |          |
| 3150           | 40.14           | V         | 55.62 | -15.48 | Avg                   | 3.05                  | 180                     |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

Date: 03/13/06

Labs: A and B

Tested By: Kyle F.

**315 MHz Version - Z Axis**

Duty Cycle: 48.3%

**With 10 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|-------|--------|-----------------------|-----------------------|-------------------------|----------|
| 315            | 77.91           | H         | 95.62 | -17.71 | Peak                  | 1                     | 270                     |          |
| 315            | 71.59           | H         | 75.62 | -4.03  | Avg                   | 1                     | 270                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 630            | 36.59           | H         | 75.62 | -39.03 | Peak                  | 1                     | 90                      |          |
| 630            | 30.27           | H         | 55.62 | -25.35 | Avg                   | 1                     | 90                      |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 945            | 35.8            | H         | 75.62 | -39.82 | Peak                  | 1                     | 270                     |          |
| 945            | 29.48           | H         | 55.62 | -26.14 | Avg                   | 1                     | 270                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 1260           | 35.66           | H         | 75.62 | -39.96 | Peak                  | 2.35                  | 135                     |          |
| 1260           | 29.34           | H         | 55.62 | -26.28 | Avg                   | 2.35                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 1575           | 42.83           | H         | 74    | -31.17 | Peak                  | 2.21                  | 135                     |          |
| 1575           | 36.51           | H         | 54    | -17.49 | Avg                   | 2.21                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 1890           | 45.59           | H         | 75.62 | -30.03 | Peak                  | 2.25                  | 135                     |          |
| 1890           | 39.27           | H         | 55.62 | -16.35 | Avg                   | 2.25                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 2205           | 46.22           | H         | 74    | -27.78 | Peak                  | 1.65                  | 270                     |          |
| 2205           | 39.9            | H         | 54    | -14.1  | Avg                   | 1.65                  | 270                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 2520           | 45.32           | H         | 75.62 | -30.3  | Peak                  | 2.83                  | 135                     |          |
| 2520           | 39              | H         | 55.62 | -16.62 | Avg                   | 2.83                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 2835           | 47.6            | H         | 74    | -26.4  | Peak                  | 2.69                  | 135                     |          |
| 2835           | 41.28           | H         | 54    | -12.72 | Avg                   | 2.69                  | 135                     |          |
|                |                 |           |       |        |                       |                       |                         |          |
| 3150           | 41.95           | H         | 75.62 | -33.67 | Peak                  | 1.82                  | 270                     |          |
| 3150           | 35.63           | H         | 55.62 | -19.99 | Avg                   | 1.82                  | 270                     |          |
|                |                 |           |       |        |                       |                       |                         |          |

Linux Technologies  
Compact Handheld Transmitter  
P/N: OTX-XXX-HH-CP8-MS

Labs: A and B

### With 10 Ohm Resistor

[illegible]

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**418 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 150 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 418            | 76.24           | V         | 100.28 | -24.04 | Peak                  | 1                     | 90                      |          |
| 418            | 69.92           | V         | 80.28  | -10.36 | Avg                   | 1                     | 90                      |          |
| 836            | 39.3            | V         | 80.28  | -40.98 | Peak                  | 1                     | 225                     |          |
| 836            | 32.98           | V         | 60.28  | -27.3  | Avg                   | 1                     | 225                     |          |
| 1254           | 38.42           | V         | 80.28  | -41.86 | Peak                  | 1.64                  | 225                     |          |
| 1254           | 32.1            | V         | 60.28  | -28.18 | Avg                   | 1.64                  | 225                     |          |
| 1672           | 53.76           | V         | 74     | -20.24 | Peak                  | 1.87                  | 0                       |          |
| 1672           | 47.44           | V         | 54     | -6.56  | Avg                   | 1.87                  | 0                       |          |
| 2090           | 46.36           | V         | 80.28  | -33.92 | Peak                  | 1.32                  | 225                     |          |
| 2090           | 40.04           | V         | 60.28  | -20.24 | Avg                   | 1.32                  | 225                     |          |
| 2508           | 44.13           | V         | 80.28  | -36.15 | Peak                  | 2.33                  | 180                     |          |
| 2508           | 37.81           | V         | 60.28  | -22.47 | Avg                   | 2.33                  | 180                     |          |
| 2926           | 44.3            | V         | 80.28  | -35.98 | Peak                  | 1.57                  | 225                     |          |
| 2926           | 37.98           | V         | 60.28  | -22.3  | Avg                   | 1.57                  | 225                     |          |
| 3344           | 57.38           | V         | 80.28  | -22.9  | Peak                  | 3                     | 315                     |          |
| 3344           | 51.06           | V         | 60.28  | -9.22  | Avg                   | 3                     | 315                     |          |
| 3762           | 49.91           | V         | 74     | -24.09 | Peak                  | 2.97                  | 315                     |          |
| 3762           | 43.59           | V         | 54     | -10.41 | Avg                   | 2.97                  | 315                     |          |
| 4180           | 44.46           | V         | 74     | -29.54 | Peak                  | 1.69                  | 225                     |          |
| 4180           | 38.14           | V         | 54     | -15.86 | Avg                   | 1.69                  | 225                     |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**418 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 150 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 418            | 86.34           | H         | 100.28 | -13.94 | Peak                  | 1                     | 315                     |          |
| 418            | 80.02           | H         | 80.28  | -0.26  | Avg                   | 1                     | 315                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 836            | 50.69           | H         | 80.28  | -29.59 | Peak                  | 1                     | 225                     |          |
| 836            | 44.37           | H         | 60.28  | -15.91 | Avg                   | 1                     | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1254           | 38.36           | H         | 80.28  | -41.92 | Peak                  | 2.39                  | 180                     |          |
| 1254           | 32.04           | H         | 60.28  | -28.24 | Avg                   | 2.39                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1672           | 59.49           | H         | 74     | -14.51 | Peak                  | 1.22                  | 90                      |          |
| 1672           | 53.17           | H         | 54     | -0.83  | Avg                   | 1.22                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2090           | 45.95           | H         | 80.28  | -34.33 | Peak                  | 3.02                  | 135                     |          |
| 2090           | 39.63           | H         | 60.28  | -20.65 | Avg                   | 3.02                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2508           | 43.47           | H         | 80.28  | -36.81 | Peak                  | 1.58                  | 180                     |          |
| 2508           | 37.15           | H         | 60.28  | -23.13 | Avg                   | 1.58                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2926           | 46.2            | H         | 80.28  | -34.08 | Peak                  | 2.95                  | 135                     |          |
| 2926           | 39.88           | H         | 60.28  | -20.4  | Avg                   | 2.95                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3344           | 56.9            | H         | 80.28  | -23.38 | Peak                  | 2.77                  | 90                      |          |
| 3344           | 50.58           | H         | 60.28  | -9.7   | Avg                   | 2.77                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3762           | 47.03           | H         | 74     | -26.97 | Peak                  | 1.42                  | 315                     |          |
| 3762           | 40.71           | H         | 54     | -13.29 | Avg                   | 1.42                  | 315                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4180           | 46.06           | H         | 74     | -27.94 | Peak                  | 1.42                  | 135                     |          |
| 4180           | 39.74           | H         | 54     | -14.26 | Avg                   | 1.42                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**418 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 150 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 418            | 85.24           | V         | 100.28 | -15.04 | Peak                  | 1                     | 135                     |          |
| 418            | 78.92           | V         | 80.28  | -1.36  | Avg                   | 1                     | 135                     |          |
| 836            | 52.9            | V         | 80.28  | -27.38 | Peak                  | 1                     | 225                     |          |
| 836            | 46.58           | V         | 60.28  | -13.7  | Avg                   | 1                     | 225                     |          |
| 1254           | 35.8            | V         | 80.28  | -44.48 | Peak                  | 2.72                  | 225                     |          |
| 1254           | 29.48           | V         | 60.28  | -30.8  | Avg                   | 2.72                  | 225                     |          |
| 1672           | 59.9            | V         | 74     | -14.1  | Peak                  | 2.21                  | 90                      |          |
| 1672           | 53.58           | V         | 54     | -0.42  | Avg                   | 2.21                  | 90                      |          |
| 2090           | 45.47           | V         | 80.28  | -34.81 | Peak                  | 1.57                  | 180                     |          |
| 2090           | 39.15           | V         | 60.28  | -21.13 | Avg                   | 1.57                  | 180                     |          |
| 2508           | 42.24           | V         | 80.28  | -38.04 | Peak                  | 2.05                  | 180                     |          |
| 2508           | 35.92           | V         | 60.28  | -24.36 | Avg                   | 2.05                  | 180                     |          |
| 2926           | 45.73           | V         | 80.28  | -34.55 | Peak                  | 2.71                  | 135                     |          |
| 2926           | 39.41           | V         | 60.28  | -20.87 | Avg                   | 2.71                  | 135                     |          |
| 3344           | 56.74           | V         | 80.28  | -23.54 | Peak                  | 1.63                  | 225                     |          |
| 3344           | 50.42           | V         | 60.28  | -9.86  | Avg                   | 1.63                  | 225                     |          |
| 3762           | 47.94           | V         | 74     | -26.06 | Peak                  | 1.72                  | 225                     |          |
| 3762           | 41.62           | V         | 54     | -12.38 | Avg                   | 1.72                  | 225                     |          |
| 4180           | 46.29           | V         | 74     | -27.71 | Peak                  | 1.72                  | 90                      |          |
| 4180           | 39.97           | V         | 54     | -14.03 | Avg                   | 1.72                  | 90                      |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**418 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 150 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 418            | 75.74           | H         | 100.28 | -24.54 | Peak                  | 1                     | 225                     |          |
| 418            | 69.42           | H         | 80.28  | -10.86 | Avg                   | 1                     | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 836            | 36.8            | H         | 80.28  | -43.48 | Peak                  | 1                     | 225                     |          |
| 836            | 30.48           | H         | 60.28  | -29.8  | Avg                   | 1                     | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1254           | 38.52           | H         | 80.28  | -41.76 | Peak                  | 3.14                  | 180                     |          |
| 1254           | 32.2            | H         | 60.28  | -28.08 | Avg                   | 3.14                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1672           | 47.37           | H         | 74     | -26.63 | Peak                  | 2.39                  | 90                      |          |
| 1672           | 41.05           | H         | 54     | -12.95 | Avg                   | 2.39                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2090           | 43.64           | H         | 80.28  | -36.64 | Peak                  | 1.56                  | 225                     |          |
| 2090           | 37.32           | H         | 60.28  | -22.96 | Avg                   | 1.56                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2508           | 45.64           | H         | 80.28  | -34.64 | Peak                  | 2.43                  | 225                     |          |
| 2508           | 39.32           | H         | 60.28  | -20.96 | Avg                   | 2.43                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2926           | 47.56           | H         | 80.28  | -32.72 | Peak                  | 2.92                  | 135                     |          |
| 2926           | 41.24           | H         | 60.28  | -19.04 | Avg                   | 2.92                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3344           | 52.62           | H         | 80.28  | -27.66 | Peak                  | 3.01                  | 135                     |          |
| 3344           | 46.3            | H         | 60.28  | -13.98 | Avg                   | 3.01                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3762           | 48.89           | H         | 74     | -25.11 | Peak                  | 2.32                  | 180                     |          |
| 3762           | 42.57           | H         | 54     | -11.43 | Avg                   | 2.32                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4180           | 46.77           | H         | 74     | -27.23 | Peak                  | 1.62                  | 225                     |          |
| 4180           | 40.45           | H         | 54     | -13.55 | Avg                   | 1.62                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**418 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 150 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 418            | 80.44           | V         | 100.28 | -19.84 | Peak                  | 1.5                   | 225                     |          |
| 418            | 74.12           | V         | 80.28  | -6.16  | Avg                   | 1.5                   | 225                     |          |
| 836            | 44.3            | V         | 80.28  | -35.98 | Peak                  | 1                     | 225                     |          |
| 836            | 37.98           | V         | 60.28  | -22.3  | Avg                   | 1                     | 225                     |          |
| 1254           | 36.8            | V         | 80.28  | -43.48 | Peak                  | 2.14                  | 180                     |          |
| 1254           | 30.48           | V         | 60.28  | -29.8  | Avg                   | 2.14                  | 180                     |          |
| 1672           | 55.96           | V         | 74     | -18.04 | Peak                  | 2.94                  | 90                      |          |
| 1672           | 49.64           | V         | 54     | -4.36  | Avg                   | 2.94                  | 90                      |          |
| 2090           | 45.03           | V         | 80.28  | -35.25 | Peak                  | 1.69                  | 225                     |          |
| 2090           | 38.71           | V         | 60.28  | -21.57 | Avg                   | 1.69                  | 225                     |          |
| 2508           | 45.85           | V         | 80.28  | -34.43 | Peak                  | 3.17                  | 225                     |          |
| 2508           | 39.53           | V         | 60.28  | -20.75 | Avg                   | 3.17                  | 225                     |          |
| 2926           | 49.06           | V         | 80.28  | -31.22 | Peak                  | 2.08                  | 225                     |          |
| 2926           | 42.74           | V         | 60.28  | -17.54 | Avg                   | 2.08                  | 225                     |          |
| 3344           | 57.95           | V         | 80.28  | -22.33 | Peak                  | 3.02                  | 225                     |          |
| 3344           | 51.63           | V         | 60.28  | -8.65  | Avg                   | 3.02                  | 225                     |          |
| 3762           | 51.66           | V         | 74     | -22.34 | Peak                  | 2.83                  | 135                     |          |
| 3762           | 45.34           | V         | 54     | -8.66  | Avg                   | 2.83                  | 135                     |          |
| 4180           | 46.04           | V         | 74     | -27.96 | Peak                  | 1.52                  | 315                     |          |
| 4180           | 39.72           | V         | 54     | -14.28 | Avg                   | 1.52                  | 315                     |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**418 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 150 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 418            | 85.84           | H         | 100.28 | -14.44 | Peak                  | 1                     | 180                     |          |
| 418            | 79.52           | H         | 80.28  | -0.76  | Avg                   | 1                     | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 836            | 52.4            | H         | 80.28  | -27.88 | Peak                  | 1                     | 45                      |          |
| 836            | 46.08           | H         | 60.28  | -14.2  | Avg                   | 1                     | 45                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1254           | 37.12           | H         | 80.28  | -43.16 | Peak                  | 1.67                  | 135                     |          |
| 1254           | 30.8            | H         | 60.28  | -29.48 | Avg                   | 1.67                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1672           | 56.81           | H         | 74     | -17.19 | Peak                  | 3.68                  | 180                     |          |
| 1672           | 50.49           | H         | 54     | -3.51  | Avg                   | 3.68                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2090           | 45.54           | H         | 80.28  | -34.74 | Peak                  | 1.83                  | 0                       |          |
| 2090           | 39.22           | H         | 60.28  | -21.06 | Avg                   | 1.83                  | 0                       |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2508           | 41.86           | H         | 80.28  | -38.42 | Peak                  | 2.56                  | 180                     |          |
| 2508           | 35.54           | H         | 60.28  | -24.74 | Avg                   | 2.56                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2926           | 48.93           | H         | 80.28  | -31.35 | Peak                  | 3.09                  | 225                     |          |
| 2926           | 42.61           | H         | 60.28  | -17.67 | Avg                   | 3.09                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3344           | 57.33           | H         | 80.28  | -22.95 | Peak                  | 2.84                  | 135                     |          |
| 3344           | 51.01           | H         | 60.28  | -9.27  | Avg                   | 2.84                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3762           | 47.53           | H         | 74     | -26.47 | Peak                  | 2.66                  | 90                      |          |
| 3762           | 41.21           | H         | 54     | -12.79 | Avg                   | 2.66                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4180           | 44.45           | H         | 74     | -29.55 | Peak                  | 1.99                  | 315                     |          |
| 4180           | 38.13           | H         | 54     | -15.87 | Avg                   | 1.99                  | 315                     |          |
|                |                 |           |        |        |                       |                       |                         |          |

Linux Technologies  
Long Range Handheld Transmitter  
P/N: OTX-XXX-HH-CP8-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 150 Ohm Reistor**

[illegible]

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**433.92 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 180 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 433.92         | 73.9            | V         | 100.82 | -26.92 | Peak                  | 1                     | 45                      |          |
| 433.92         | 67.58           | V         | 80.82  | -13.24 | Avg                   | 1                     | 45                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 867.84         | 38.99           | V         | 80.82  | -41.83 | Peak                  | 1                     | 90                      |          |
| 867.84         | 32.67           | V         | 60.82  | -28.15 | Avg                   | 1                     | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1301.76        | 34.9            | V         | 74     | -39.1  | Peak                  | 1.62                  | 225                     |          |
| 1301.76        | 28.58           | V         | 54     | -25.42 | Avg                   | 1.62                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1735.7         | 45.11           | V         | 80.82  | -35.71 | Peak                  | 2.37                  | 225                     |          |
| 1735.7         | 38.79           | V         | 60.82  | -22.03 | Avg                   | 2.37                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2169.6         | 46.31           | V         | 80.82  | -34.51 | Peak                  | 1.47                  | 180                     |          |
| 2169.6         | 39.99           | V         | 60.82  | -20.83 | Avg                   | 1.47                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2603.52        | 44.89           | V         | 80.82  | -35.93 | Peak                  | 2.54                  | 315                     |          |
| 2603.52        | 38.57           | V         | 60.82  | -22.25 | Avg                   | 2.54                  | 315                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3037.44        | 42.22           | V         | 80.82  | -38.6  | Peak                  | 1.75                  | 315                     |          |
| 3037.44        | 35.9            | V         | 60.82  | -24.92 | Avg                   | 1.75                  | 315                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3471.36        | 50.82           | V         | 80.82  | -30    | Peak                  | 2.21                  | 180                     |          |
| 3471.36        | 44.5            | V         | 60.82  | -16.32 | Avg                   | 2.21                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3905.28        | 46.03           | V         | 74     | -27.97 | Peak                  | 1.63                  | 90                      |          |
| 3905.28        | 39.71           | V         | 54     | -14.29 | Avg                   | 1.63                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4339.2         | 48.3            | V         | 74     | -25.7  | Peak                  | 2.45                  | 90                      |          |
| 4339.2         | 33.85           | V         | 54     | -20.15 | Avg                   | 2.45                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**433.92 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 180 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 433.92         | 86.9            | H         | 100.82 | -13.92 | Peak                  | 1                     | 90                      |          |
| 433.92         | 80.58           | H         | 80.82  | -0.24  | Avg                   | 1                     | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 867.84         | 50.29           | H         | 80.82  | -30.53 | Peak                  | 1                     | 225                     |          |
| 867.84         | 43.97           | H         | 60.82  | -16.85 | Avg                   | 1                     | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1301.76        | 35.57           | H         | 74     | -38.43 | Peak                  | 2.31                  | 180                     |          |
| 1301.76        | 29.25           | H         | 54     | -24.75 | Avg                   | 2.31                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1735.7         | 51.45           | H         | 80.82  | -29.37 | Peak                  | 2.6                   | 270                     |          |
| 1735.7         | 45.13           | H         | 60.82  | -15.69 | Avg                   | 2.6                   | 270                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2169.6         | 46.78           | H         | 80.82  | -34.04 | Peak                  | 2.91                  | 90                      |          |
| 2169.6         | 40.46           | H         | 60.82  | -20.36 | Avg                   | 2.91                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2603.52        | 44.3            | H         | 80.82  | -36.52 | Peak                  | 2.51                  | 90                      |          |
| 2603.52        | 37.98           | H         | 60.82  | -22.84 | Avg                   | 2.51                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3037.44        | 43.97           | H         | 80.82  | -36.85 | Peak                  | 2.25                  | 45                      |          |
| 3037.44        | 37.65           | H         | 60.82  | -23.17 | Avg                   | 2.25                  | 45                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3471.36        | 52.09           | H         | 80.82  | -28.73 | Peak                  | 2.79                  | 180                     |          |
| 3471.36        | 45.77           | H         | 60.82  | -15.05 | Avg                   | 2.79                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3905.28        | 42.46           | H         | 74     | -31.54 | Peak                  | 1.88                  | 315                     |          |
| 3905.28        | 36.14           | H         | 54     | -17.86 | Avg                   | 1.88                  | 315                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4339.2         | 51.17           | H         | 74     | -22.83 | Peak                  | 1.88                  | 315                     |          |
| 4339.2         | 44.85           | H         | 54     | -9.15  | Avg                   | 1.88                  | 315                     |          |
|                |                 |           |        |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

Date: 03/02/06

Labs: A and B

Tested By: Kyle F.

**433.92 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 180 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 433.92         | 84              | V         | 100.82 | -16.82 | Peak                  | 1                     | 45                      |          |
| 433.92         | 77.68           | V         | 80.82  | -3.14  | Avg                   | 1                     | 45                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 867.84         | 51.59           | V         | 80.82  | -29.23 | Peak                  | 1                     | 90                      |          |
| 867.84         | 45.27           | V         | 60.82  | -15.55 | Avg                   | 1                     | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1301.76        | 34.76           | V         | 74     | -39.24 | Peak                  | 1.86                  | 180                     |          |
| 1301.76        | 28.44           | V         | 54     | -25.56 | Avg                   | 1.86                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1735.7         | 51.62           | V         | 80.82  | -29.2  | Peak                  | 2.88                  | 135                     |          |
| 1735.7         | 45.3            | V         | 60.82  | -15.52 | Avg                   | 2.88                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2169.6         | 47.46           | V         | 80.82  | -33.36 | Peak                  | 2.74                  | 0                       |          |
| 2169.6         | 41.14           | V         | 60.82  | -19.68 | Avg                   | 2.74                  | 0                       |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2603.52        | 44.97           | V         | 80.82  | -35.85 | Peak                  | 2.46                  | 135                     |          |
| 2603.52        | 38.65           | V         | 60.82  | -22.17 | Avg                   | 2.46                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3037.44        | 41.95           | V         | 80.82  | -38.87 | Peak                  | 1.93                  | 135                     |          |
| 3037.44        | 35.63           | V         | 60.82  | -25.19 | Avg                   | 1.93                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3471.36        | 53.2            | V         | 80.82  | -27.62 | Peak                  | 1.91                  | 0                       |          |
| 3471.36        | 46.88           | V         | 60.82  | -13.94 | Avg                   | 1.91                  | 0                       |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3905.28        | 49.03           | V         | 74     | -24.97 | Peak                  | 1.37                  | 180                     |          |
| 3905.28        | 42.71           | V         | 54     | -11.29 | Avg                   | 1.37                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4339.2         | 50.73           | V         | 74     | -23.27 | Peak                  | 2.75                  | 180                     |          |
| 4339.2         | 44.41           | V         | 54     | -9.59  | Avg                   | 2.75                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**433.92 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 180 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 433.92         | 73.6            | H         | 100.82 | -27.22 | Peak                  | 1                     | 225                     |          |
| 433.92         | 67.28           | H         | 80.82  | -13.54 | Avg                   | 1                     | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 867.84         | 34.29           | H         | 80.82  | -46.53 | Peak                  | 1                     | 90                      |          |
| 867.84         | 27.97           | H         | 60.82  | -32.85 | Avg                   | 1                     | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1301.76        | 34.82           | H         | 74     | -39.18 | Peak                  | 2.16                  | 135                     |          |
| 1301.76        | 28.5            | H         | 54     | -25.5  | Avg                   | 2.16                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1735.7         | 44.68           | H         | 80.82  | -36.14 | Peak                  | 2.64                  | 135                     |          |
| 1735.7         | 38.36           | H         | 60.82  | -22.46 | Avg                   | 2.64                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2169.6         | 45.9            | H         | 80.82  | -34.92 | Peak                  | 2.66                  | 135                     |          |
| 2169.6         | 39.58           | H         | 60.82  | -21.24 | Avg                   | 2.66                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2603.52        | 49.37           | H         | 80.82  | -31.45 | Peak                  | 2.56                  | 180                     |          |
| 2603.52        | 43.05           | H         | 60.82  | -17.77 | Avg                   | 2.56                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3037.44        | 43.62           | H         | 80.82  | -37.2  | Peak                  | 1.49                  | 225                     |          |
| 3037.44        | 37.3            | H         | 60.82  | -23.52 | Avg                   | 1.49                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3471.36        | 55.2            | H         | 80.82  | -25.62 | Peak                  | 1.44                  | 135                     |          |
| 3471.36        | 48.88           | H         | 60.82  | -11.94 | Avg                   | 1.44                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3905.28        | 43.38           | H         | 74     | -30.62 | Peak                  | 2.22                  | 90                      |          |
| 3905.28        | 37.06           | H         | 54     | -16.94 | Avg                   | 2.22                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4339.2         | 49.02           | H         | 74     | -24.98 | Peak                  | 2.42                  | 90                      |          |
| 4339.2         | 42.7            | H         | 54     | -11.3  | Avg                   | 2.42                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**433.92 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 180 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 433.92         | 77.2            | V         | 100.82 | -23.62 | Peak                  | 1                     | 90                      |          |
| 433.92         | 70.88           | V         | 80.82  | -9.94  | Avg                   | 1                     | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 867.84         | 38.99           | V         | 80.82  | -41.83 | Peak                  | 1                     | 225                     |          |
| 867.84         | 32.67           | V         | 60.82  | -28.15 | Avg                   | 1                     | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1301.76        | 35.09           | V         | 74     | -38.91 | Peak                  | 2.33                  | 90                      |          |
| 1301.76        | 28.77           | V         | 54     | -25.23 | Avg                   | 2.33                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1735.7         | 50.85           | V         | 80.82  | -29.97 | Peak                  | 2.47                  | 90                      |          |
| 1735.7         | 44.53           | V         | 60.82  | -16.29 | Avg                   | 2.47                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2169.6         | 46.75           | V         | 80.82  | -34.07 | Peak                  | 2.2                   | 135                     |          |
| 2169.6         | 40.43           | V         | 60.82  | -20.39 | Avg                   | 2.2                   | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2603.52        | 48.11           | V         | 80.82  | -32.71 | Peak                  | 1.68                  | 90                      |          |
| 2603.52        | 41.79           | V         | 60.82  | -19.03 | Avg                   | 1.68                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3037.44        | 43.85           | V         | 80.82  | -36.97 | Peak                  | 1.46                  | 90                      |          |
| 3037.44        | 37.53           | V         | 60.82  | -23.29 | Avg                   | 1.46                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3471.36        | 53.8            | V         | 80.82  | -27.02 | Peak                  | 1.89                  | 135                     |          |
| 3471.36        | 47.48           | V         | 60.82  | -13.34 | Avg                   | 1.89                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3905.28        | 48.11           | V         | 74     | -25.89 | Peak                  | 2.67                  | 135                     |          |
| 3905.28        | 41.79           | V         | 54     | -12.21 | Avg                   | 2.67                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4339.2         | 53.18           | V         | 74     | -20.82 | Peak                  | 2.43                  | 225                     |          |
| 4339.2         | 46.86           | V         | 54     | -7.14  | Avg                   | 2.43                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |

**FCC 15.231**

Linx Technologies  
 Compact Handheld Transmitter  
 P/N: OTX-XXX-HH-CP8-MS

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

**433.92 MHz Version - X Axis**

Duty Cycle: 48.3%

**With 180 Ohm Resistor**

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol (v/h) | Limit  | Margin | Peak /<br>QP /<br>Avg | Ant.<br>Height<br>(m) | Table<br>Angle<br>(deg) | Comments |
|----------------|-----------------|-----------|--------|--------|-----------------------|-----------------------|-------------------------|----------|
| 433.92         | 85.7            | H         | 100.82 | -15.12 | Peak                  | 1                     | 225                     |          |
| 433.92         | 79.38           | H         | 80.82  | -1.44  | Avg                   | 1                     | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 867.84         | 45.89           | H         | 80.82  | -34.93 | Peak                  | 1                     | 90                      |          |
| 867.84         | 39.57           | H         | 60.82  | -21.25 | Avg                   | 1                     | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1301.76        | 34.43           | H         | 74     | -39.57 | Peak                  | 1.48                  | 90                      |          |
| 1301.76        | 28.11           | H         | 54     | -25.89 | Avg                   | 1.48                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 1735.7         | 47.4            | H         | 80.82  | -33.42 | Peak                  | 2.76                  | 135                     |          |
| 1735.7         | 41.08           | H         | 60.82  | -19.74 | Avg                   | 2.76                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2169.6         | 47.83           | H         | 80.82  | -32.99 | Peak                  | 1.83                  | 135                     |          |
| 2169.6         | 41.51           | H         | 60.82  | -19.31 | Avg                   | 1.83                  | 135                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 2603.52        | 43.78           | H         | 80.82  | -37.04 | Peak                  | 1.32                  | 225                     |          |
| 2603.52        | 37.46           | H         | 60.82  | -23.36 | Avg                   | 1.32                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3037.44        | 42.29           | H         | 80.82  | -38.53 | Peak                  | 2.09                  | 180                     |          |
| 3037.44        | 35.97           | H         | 60.82  | -24.85 | Avg                   | 2.09                  | 180                     |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3471.36        | 51.66           | H         | 80.82  | -29.16 | Peak                  | 2.7                   | 90                      |          |
| 3471.36        | 45.34           | H         | 60.82  | -15.48 | Avg                   | 2.7                   | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 3905.28        | 43.94           | H         | 74     | -30.06 | Peak                  | 1.99                  | 90                      |          |
| 3905.28        | 37.62           | H         | 54     | -16.38 | Avg                   | 1.99                  | 90                      |          |
|                |                 |           |        |        |                       |                       |                         |          |
| 4339.2         | 50.82           | H         | 74     | -23.18 | Peak                  | 2.82                  | 225                     |          |
| 4339.2         | 44.5            | H         | 54     | -9.5   | Avg                   | 2.82                  | 225                     |          |
|                |                 |           |        |        |                       |                       |                         |          |

Linux Technologies  
Long Range Handheld Transmitter  
P/N: OTX-XXX-HH-CP8-MS

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

### X-Axis - Worst Case With 180 Ohm Reistor

[illegible]

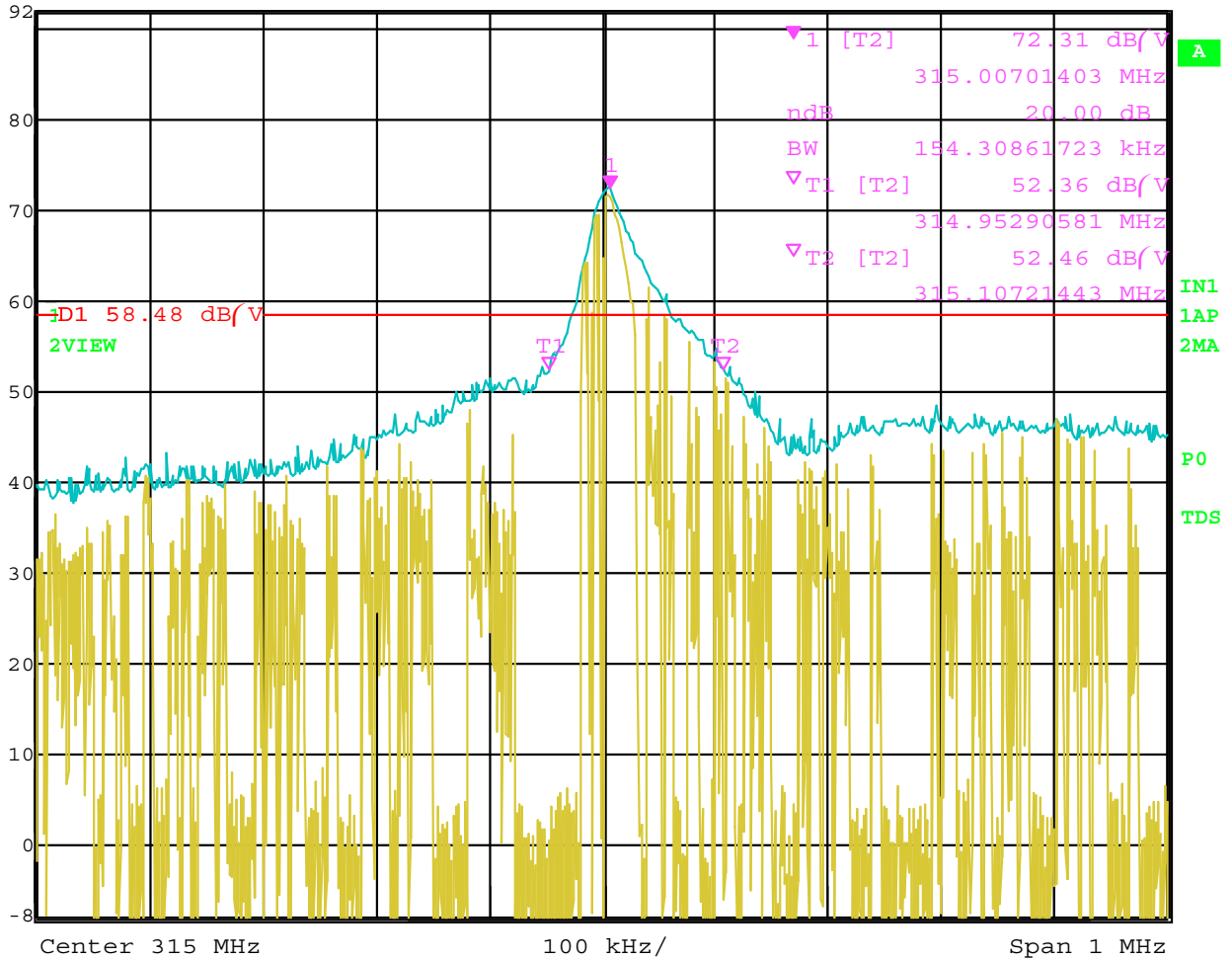
***-20 dB BANDWIDTH***

***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 154.30861723 kHz | SWT | 5.5 ms  | Unit   | dB/V  |



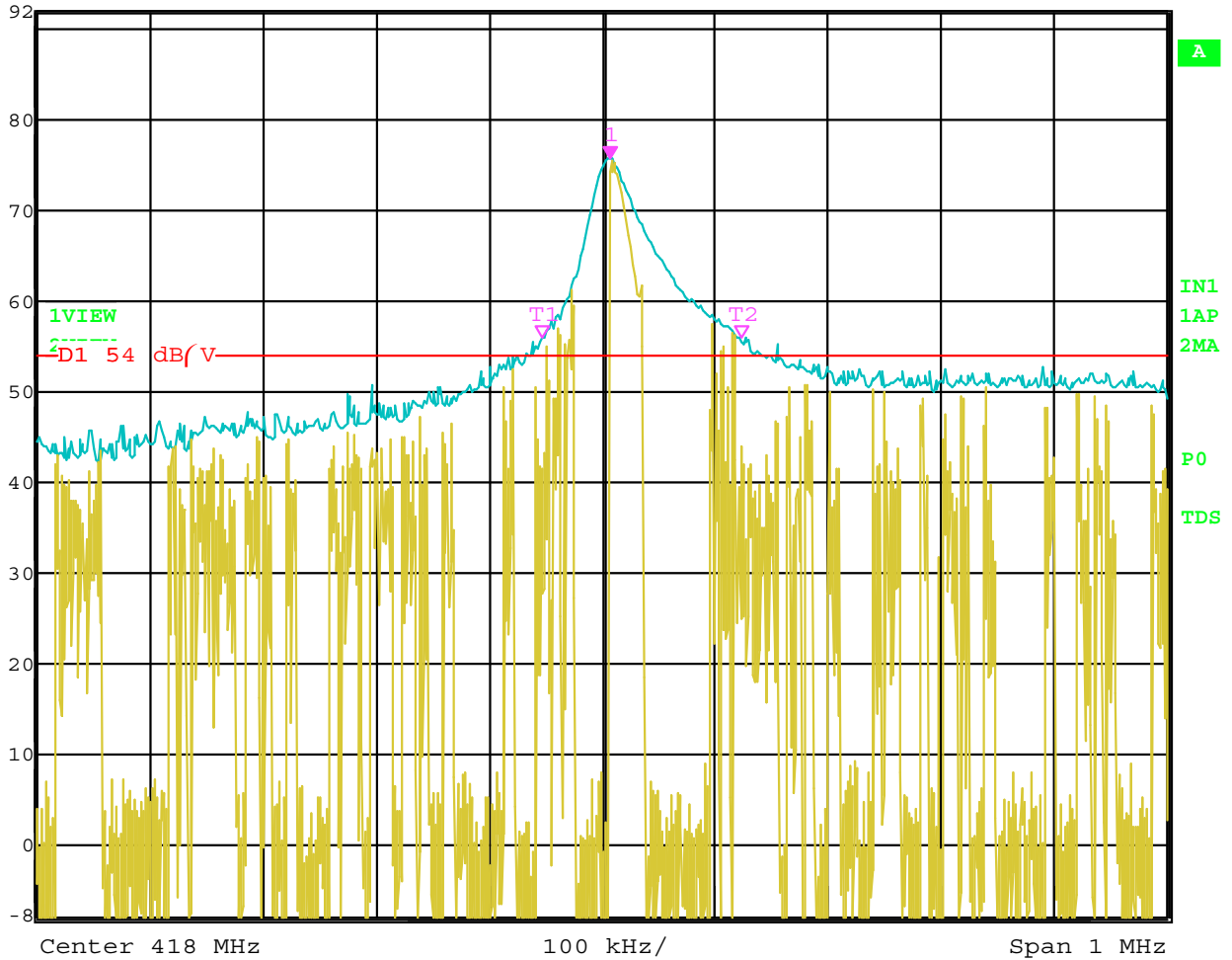
Date: 15.MAR.2006 16:14:31

-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 176.35270541 kHz | SWT | 5.5 ms  | Unit   | dB/V  |



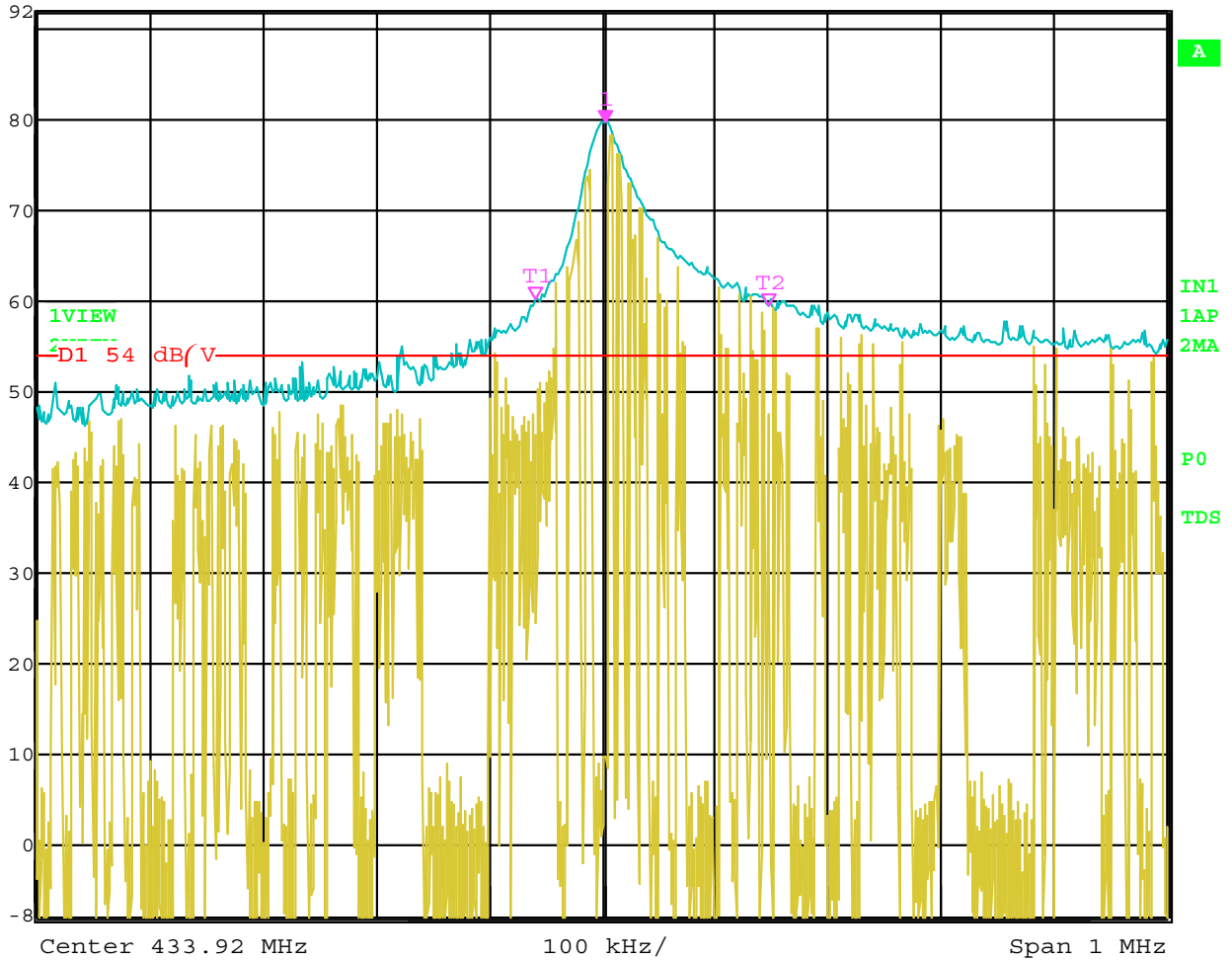
Date: 3.MAR.2006 09:24:27

-20 dB Bandwidth – 418 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 206.41282565 kHz | SWT | 5.5 ms  | Unit   | dB/V  |



Date: 3.MAR.2006 09:25:08

-20 dB Bandwidth – 433.92 MHz Version

