FCC PART 15, SUBPART B and C
TEST REPORT

for

REMOTE CONTROL – TRANSMITTER

MODEL: ROAM-TR

Prepared for

HUNTER INDUSTRIES, INC.
1940 DIAMOND STREET
SAN MARCOS, CALIFORNIA 92078

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

MICHAEL CHRISTENSEN

COMPATIBLE ELECTRONICS INC.
114 OLINDA DRIVE
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DATE: OCTOBER 24, 2008

	REPORT	APPENDICES					TOTAL
	BODY	***A***	***B***	***C***	***D***	***E***	
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GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested:	Remote Control – Transmitter Model: ROAM-TR S/N: N/A
Product Description:	See Expository Statement
Modifications:	The EUT was not modified in order to meet the specifications.
Customer:	Hunter Industries, Inc. 1940 Diamond Street San Marcos, California 92078
Test Date:	September 11, 2008
Test Specifications:	EMI requirements CFR Title 47, Part 15 Subpart B; and Subpart C, Sections 15.205, 15.209 and 15.231
Test Procedure:	ANSI C63.4
Test Deviations:	The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	This test was not performed because the EUT operates on battery power only and will not be connected to the AC public mains.
2	Radiated RF Emissions, 10 kHz – 4400 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209, and 15.231.
3	Radiated RF Emissions, 10 kHz – 4400 MHz (Digital Portion)	Complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B.
4	-20 dB Bandwidth	Complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231(c).

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Remote Control – Transmitter, Model: ROAM-TR. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.207, 15.209, and 15.231 for the transmitter portion.

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

Hunter Industries, Inc.

Lucian Scripca	Senior Electronics Engineer

Compatible Electronics, Inc.

Kyle Fujimoto	Test Engineer
Michael Christensen	Lab Manager

2.4 Date Test Sample was Received

The test sample was received on September 10, 2008.

2.5 Disposition of the Test Sample

The sample has not been returned to Hunter Industries, Inc. as of October 24, 2008.

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

3. APPLICABLE DOCUMENTS

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

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4 2003	American National Standard for 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 Remote Control – Transmitter, Model: ROAM-TR (EUT) was tested as a stand alone unit in three orthogonal axis. The EUT was transmitting on a continuous basis. The EUT's antenna is soldered onto the PCB.

The EUT is automatically activated when a button is pressed and shuts off within 100 mS after the button is released.

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

4.1.1 Cable Construction and Termination

There are no external cables connected to the EUT.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
REMOTE CONTROL – TRANSMITTER (EUT)	HUNTER INDUSTRIES, INC.	ROAM-TR	N/A	**M3URMT**

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
RF RADIATED EMISSIONS TEST EQUIPMENT					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100172	November 27, 2006	Nov. 27, 2008
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08768	August 22, 2008	August 22, 2009
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22262	August 22, 2008	August 22, 2009
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	August 22, 2008	August 22, 2009
Biconical Antenna	Com Power	AB-900	15226	February 28, 2008	Feb. 28, 2009
Log Periodic Antenna	Com Power	AL-100	16060	June 27, 2008	June 27, 2009
Preamplifier	Com Power	PA-102	1017	January 11, 2008	Jan. 11, 2009
Loop Antenna	Com-Power	AL-130	17089	September 24, 2007	Sept. 24, 2008
Horn Antenna	Com Power	AH-118	071175	June 27, 2008	June 27, 2010
Microwave Preamplifier	Com-Power	PA-122	181921	March 3, 2008	March 3, 2009
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 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

Test Results:

This test was not performed because the EUT operates on battery power only and will not be connected to the AC public mains.

7.2 Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver was used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com-Power Preamplifier Model: PA-102 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 EMI Receiver was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer or EMI Receiver records the highest measured reading over all the sweeps.

The readings were averaged by a “duty cycle correction factor”, derived from 20 log (dwell time / one pulse train with blanking interval).

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 4.4 GHz	1 MHz	Horn Antenna

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

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

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231.

7.4 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. Plots of the -20 dB bandwidth are located in Appendix E.

Test Results:

Complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231(c).

8. CONCLUSIONS

The Remote Control – Transmitter, Model: ROAM-TR meets all of the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.207, 15.209, and 15.231 for the transmitter portion.

APPENDIX A

LABORATORY RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada

Radio-Frequency Technologies (Competent Body)

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.231 or FCC Class B specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

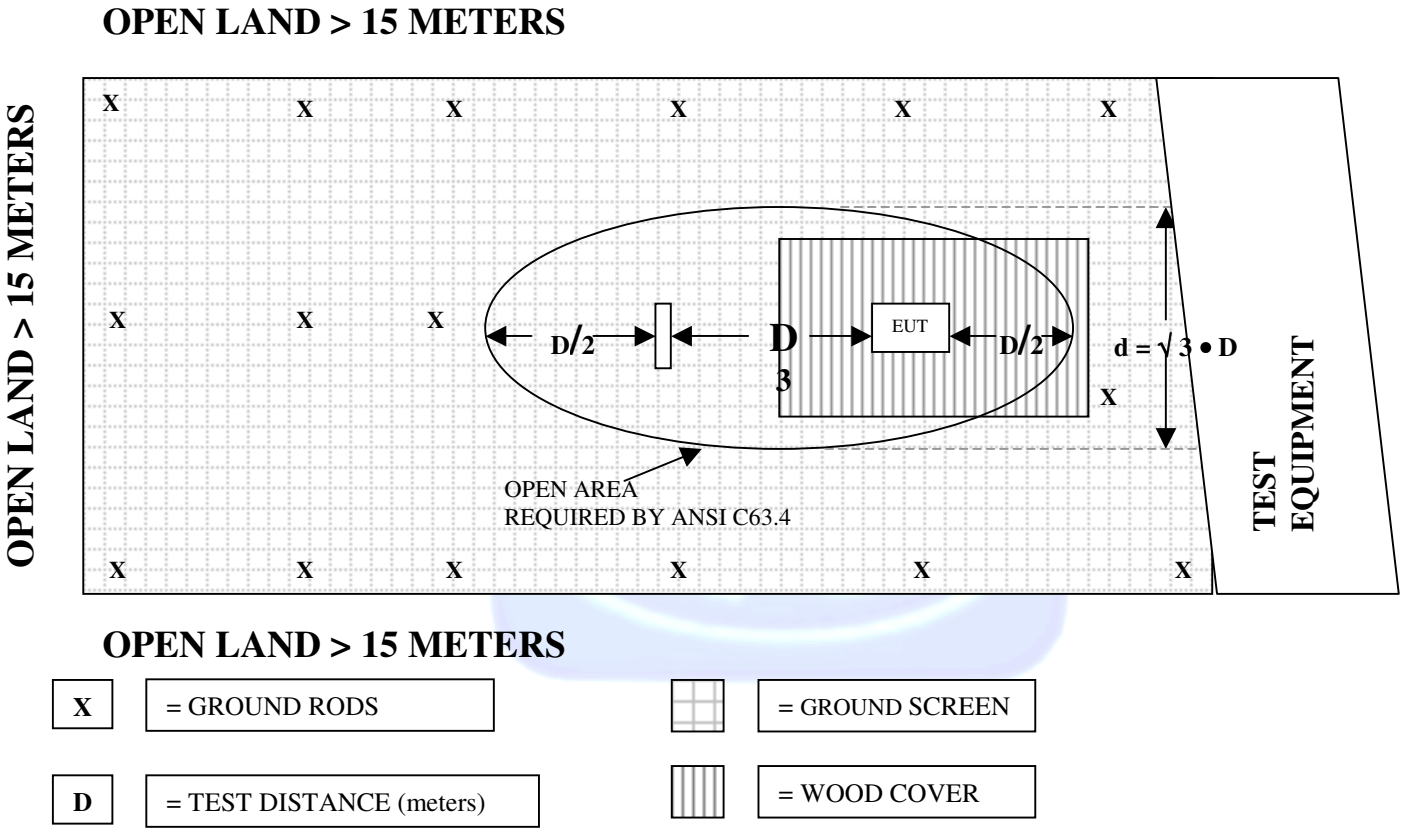
Remote Control – Transmitter
Model: ROAM-TR
S/N: N/A

There were no additional models covered under this report.

APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED SITE



COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15226

CALIBRATION DATE: FEBRUARY 28, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	12.1	100	10.7
35	12.2	120	13.6
40	11.7	140	12.1
45	9.9	160	12.2
50	11.3	180	15.2
60	9.4	200	16.5
70	7.6	250	16.5
80	6.0	275	18.1
90	6.8	300	21.5

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: JUNE 27, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.7	700	21.2
400	15.3	800	21.7
500	17.4	900	21.8
600	190	1000	22.8

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 11, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.2	300	38.3
40	38.0	350	38.0
50	38.3	400	38.1
60	38.6	450	37.5
70	38.4	500	37.9
80	38.4	550	37.9
90	38.3	600	37.8
100	38.1	650	37.5
125	38.5	700	38.0
150	38.2	750	37.7
175	38.1	800	37.1
200	38.4	850	37.1
225	38.2	900	37.1
250	38.2	950	37.0
275	38.0	1000	36.5

COM-POWER PA-122

PREAMPLIFIER

S/N: 181921

CALIBRATION DATE: MARCH 3, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	36.32	10.0	35.47
1.5	35.40	10.5	35.05
2.0	34.77	11.0	34.16
2.5	35.07	11.5	33.75
3.0	34.86	12.0	34.65
3.5	34.48	12.5	34.41
4.0	34.30	13.0	35.36
4.5	33.96	13.5	35.30
5.0	34.06	14.0	35.87
5.5	34.54	14.5	36.44
6.0	35.90	15.0	36.24
6.5	36.85	15.5	35.92
7.0	36.55	16.0	35.53
7.5	35.31	16.5	35.29
8.0	33.57	17.0	34.96
8.5	33.36	17.5	34.02
9.0	35.01	18.0	33.39
9.5	35.97	18.5	32.70

COM-POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: JUNE 27, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.5	10.0	39.4
1.5	25.4	10.5	39.7
2.0	28.3	11.0	39.0
2.5	28.9	11.5	40.0
3.0	29.7	12.0	39.7
3.5	30.8	12.5	41.7
4.0	31.4	13.0	42.7
4.5	32.6	13.5	41.2
5.0	33.7	14.0	41.6
5.5	34.4	14.5	43.2
6.0	34.7	15.0	42.3
6.5	35.4	15.5	39.3
7.0	37.0	16.0	41.7
7.5	37.4	16.5	39.6
8.0	37.6	17.0	43.0
8.5	37.6	17.5	47.1
9.0	38.5	18.0	46.2
9.5	38.6		

COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: SEPTEMBER 24, 2007

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.27	10.23
0.01	-41.96	9.54
0.02	-41.73	9.77
0.05	-42.0	9.5
0.07	-41.5	10.0
0.1	-41.43	10.07
0.2	-43.9	7.9
0.3	-41.43	10.07
0.5	-41.40	10.1
0.7	-41.13	10.37
1	-40.83	10.67
2	-40.30	11.20
3	-40.60	10.90
4	-41.00	10.50
5	-40.20	11.30
10	-40.40	11.10
15	-41.67	9.83
20	-41.10	10.40
25	-42.80	8.70
30	-42.80	8.70

FRONT VIEW

HUNTER INDUSTRIES, INC.
REMOTE CONTROL – TRANSMITTER
MODEL: ROAM-TR
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

HUNTER INDUSTRIES, INC.
REMOTE CONTROL – TRANSMITTER
MODEL: ROAM-TR
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

Hunter Industries, Inc.
Remote Control - Transmitter
Model: ROAM-TR

Date: 09/11/08
Lab: B/D
Tested By: Kyle Fujimoto

X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	86.01	V	100.82	-14.81	Peak	1	135	
433.92	68.25	V	80.82	-12.57	Avg	1	135	
867.84	48.93	V	80.82	-31.89	Peak	1	135	
867.84	31.17	V	60.82	-29.65	Avg	1	135	
1301.76	35.95	V	74	-38.05	Peak	1.12	135	
1301.76	18.19	V	54	-35.81	Avg	1.12	135	
1735.68	42.41	V	80.82	-38.41	Peak	1.16	150	
1735.68	24.65	V	60.82	-36.17	Avg	1.16	150	
2169.6	37.81	V	80.82	-43.01	Peak	1.16	150	
2169.6	20.05	V	60.82	-40.77	Avg	1.16	150	
2603.52	37.15	V	80.82	-43.67	Peak	1.18	150	
2603.52	19.39	V	60.82	-41.43	Avg	1.18	150	
3037.44	40.01	V	80.82	-40.81	Peak	1.19	90	
3037.44	22.25	V	60.82	-38.57	Avg	1.19	90	
3471.36	43.77	V	80.82	-37.05	Peak	1.16	150	
3471.36	26.01	V	60.82	-34.81	Avg	1.16	150	
3905.28	41.77	V	74	-32.23	Peak	1.18	190	
3905.28	24.01	V	54	-29.99	Avg	1.18	190	
4339.2	42.21	V	74	-31.79	Peak	1.16	150	
4339.2	24.45	V	54	-29.55	Avg	1.16	150	

FCC 15.231

Hunter Industries, Inc.
Remote Control - Transmitter
Model: ROAM-TR

Date: 09/11/08
Lab: B/D
Tested By: Kyle Fujimoto

X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	97.98	H	100.82	-2.84	Peak	1	90	
433.92	80.22	H	80.82	-0.6	Avg	1	90	
867.84	50.73	H	80.82	-30.09	Peak	1	90	
867.84	32.97	H	60.82	-27.85	Avg	1	90	
1301.76	34.28	H	74	-39.72	Peak	1.15	150	
1301.76	16.52	H	54	-37.48	Avg	1.15	150	
1735.68	43.81	H	80.82	-37.01	Peak	1.18	90	
1735.68	26.05	H	60.82	-34.77	Avg	1.18	90	
2169.6	36.15	H	80.82	-44.67	Peak	1.18	150	
2169.6	18.39	H	60.82	-42.43	Avg	1.18	150	
2603.52	37.32	H	80.82	-43.5	Peak	1.15	150	
2603.52	19.56	H	60.82	-41.26	Avg	1.15	150	
3037.44	37.55	H	80.82	-43.27	Peak	1.16	180	
3037.44	19.79	H	60.82	-41.03	Avg	1.16	180	
3471.36	40.02	H	80.82	-40.8	Peak	1.19	225	
3471.36	22.26	H	60.82	-38.56	Avg	1.19	225	
3905.28	41.21	H	74	-32.79	Peak	1.25	150	
3905.28	23.45	H	54	-30.55	Avg	1.25	150	
4339.2	42.93	H	74	-31.07	Peak	1.35	180	
4339.2	25.17	H	54	-28.83	Avg	1.35	180	

FCC 15.231

Hunter Industries, Inc.
Remote Control - Transmitter
Model: ROAM-TR

Date: 09/11/08
Lab: B/D
Tested By: Kyle Fujimoto

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	86.14	V	100.82	-14.68	Peak	1	180	
433.92	68.38	V	80.82	-12.44	Avg	1	180	
867.84	48.93	V	80.82	-31.89	Peak	1	180	
867.84	31.17	V	60.82	-29.65	Avg	1	180	
1301.76	37.65	V	74	-36.35	Peak	1.12	150	
1301.76	19.89	V	54	-34.11	Avg	1.12	150	
1735.68	45.53	V	80.82	-35.29	Peak	1.15	315	
1735.68	27.77	V	60.82	-33.05	Avg	1.15	315	
2169.6	37.57	V	80.82	-43.25	Peak	1.16	150	
2169.6	19.81	V	60.82	-41.01	Avg	1.16	150	
2603.52	38.59	V	80.82	-42.23	Peak	1.15	150	
2603.52	20.83	V	60.82	-39.99	Avg	1.15	150	
3037.44	38.77	V	80.82	-42.05	Peak	1.18	150	
3037.44	21.01	V	60.82	-39.81	Avg	1.18	150	
3471.36	46.78	V	80.82	-34.04	Peak	1.15	150	
3471.36	29.02	V	60.82	-31.8	Avg	1.15	150	
3905.28	44.34	V	74	-29.66	Peak	1.19	135	
3905.28	26.58	V	54	-27.42	Avg	1.19	135	
4339.2	42.83	V	74	-31.17	Peak	1.16	150	
4339.2	25.07	V	54	-28.93	Avg	1.16	150	

FCC 15.231

Hunter Industries, Inc.
Remote Control - Transmitter
Model: ROAM-TR

Date: 09/11/08
Lab: B/D
Tested By: Kyle Fujimoto

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	83.38	H	100.82	-17.44	Peak	1	270	
433.92	65.62	H	80.82	-15.2	Avg	1	270	
867.84	43.33	H	80.82	-37.49	Peak	1	270	
867.84	25.57	H	60.82	-35.25	Avg	1	270	
1301.76	32.11	H	74	-41.89	Peak	1.16	135	
1301.76	14.35	H	54	-39.65	Avg	1.16	135	
1735.68	39.33	H	80.82	-41.49	Peak	1.15	150	
1735.68	21.57	H	60.82	-39.25	Avg	1.15	150	
2169.6	36.77	H	80.82	-44.05	Peak	1.15	150	
2169.6	19.01	H	60.82	-41.81	Avg	1.15	150	
2603.52	37.69	H	80.82	-43.13	Peak	1.18	150	
2603.52	19.93	H	60.82	-40.89	Avg	1.18	150	
3037.44	41.22	H	80.82	-39.6	Peak	1.16	225	
3037.44	23.46	H	60.82	-37.36	Avg	1.16	225	
3471.36	43.63	H	80.82	-37.19	Peak	1.15	125	
3471.36	25.87	H	60.82	-34.95	Avg	1.15	125	
3905.28	41.02	H	74	-32.98	Peak	1.18	150	
3905.28	23.26	H	54	-30.74	Avg	1.18	150	
4339.2	41.52	H	74	-32.48	Peak	1.19	150	
4339.2	23.76	H	54	-30.24	Avg	1.19	150	

FCC 15.231

Hunter Industries, Inc.
Remote Control - Transmitter
Model: ROAM-TR

Date: 09/11/08
Lab: B/D
Tested By: Kyle Fujimoto

Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	87.84	V	100.82	-12.98	Peak	1	90	
433.92	70.08	V	80.82	-10.74	Avg	1	90	
867.84	49.13	V	80.82	-31.69	Peak	1	90	
867.84	31.37	V	60.82	-29.45	Avg	1	90	
1301.76	32.58	V	74	-41.42	Peak	1.15	150	
1301.76	14.82	V	54	-39.18	Avg	1.15	150	
1735.68	42.92	V	80.82	-37.9	Peak	1.16	135	
1735.68	25.16	V	60.82	-35.66	Avg	1.16	135	
2169.6	37.64	V	80.82	-43.18	Peak	1.15	150	
2169.6	19.88	V	60.82	-40.94	Avg	1.15	150	
2603.52	38.16	V	80.82	-42.66	Peak	1.16	150	
2603.52	20.4	V	60.82	-40.42	Avg	1.16	150	
3037.44	39.09	V	80.82	-41.73	Peak	1.21	180	
3037.44	21.33	V	60.82	-39.49	Avg	1.21	180	
3471.36	43.54	V	80.82	-37.28	Peak	1.16	150	
3471.36	25.78	V	60.82	-35.04	Avg	1.16	150	
3905.28	44.83	V	74	-29.17	Peak	1.15	150	
3905.28	27.07	V	54	-26.93	Avg	1.15	150	
4339.2	41.36	V	74	-32.64	Peak	1.18	180	
4339.2	23.6	V	54	-30.4	Avg	1.18	180	

FCC 15.231

Hunter Industries, Inc.
Remote Control - Transmitter
Model: ROAM-TR

Date: 09/11/08
Lab: B/D
Tested By: Kyle Fujimoto

Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	98.08	H	100.82	-2.74	Peak	1	135	
433.92	80.32	H	80.82	-0.5	Avg	1	135	
867.84	52.93	H	80.82	-27.89	Peak	1	135	
867.84	35.17	H	60.82	-25.65	Avg	1	135	
1301.76	35.29	H	74	-38.71	Peak	1.12	150	
1301.76	17.53	H	54	-36.47	Avg	1.12	150	
1735.68	44.87	H	80.82	-35.95	Peak	1.16	180	
1735.68	27.11	H	60.82	-33.71	Avg	1.16	180	
2169.6	37.73	H	80.82	-43.09	Peak	1.18	145	
2169.6	19.97	H	60.82	-40.85	Avg	1.18	145	
2603.52	37.81	H	80.82	-43.01	Peak	1.16	135	
2603.52	20.05	H	60.82	-40.77	Avg	1.16	135	
3037.44	39.24	H	80.82	-41.58	Peak	1.18	150	
3037.44	21.48	H	60.82	-39.34	Avg	1.18	150	
3471.36	44.06	H	80.82	-36.76	Peak	1.15	135	
3471.36	26.3	H	60.82	-34.52	Avg	1.15	135	
3905.28	40.72	H	74	-33.28	Peak	1.19	150	
3905.28	22.96	H	54	-31.04	Avg	1.19	150	
4339.2	41.18	H	74	-32.82	Peak	1.15	150	
4339.2	23.42	H	54	-30.58	Avg	1.15	150	

FCC 15.231 and FCC Class B
Hunter Industries, Inc.
Remote Control - Transmitter
Model: ROAM-TR

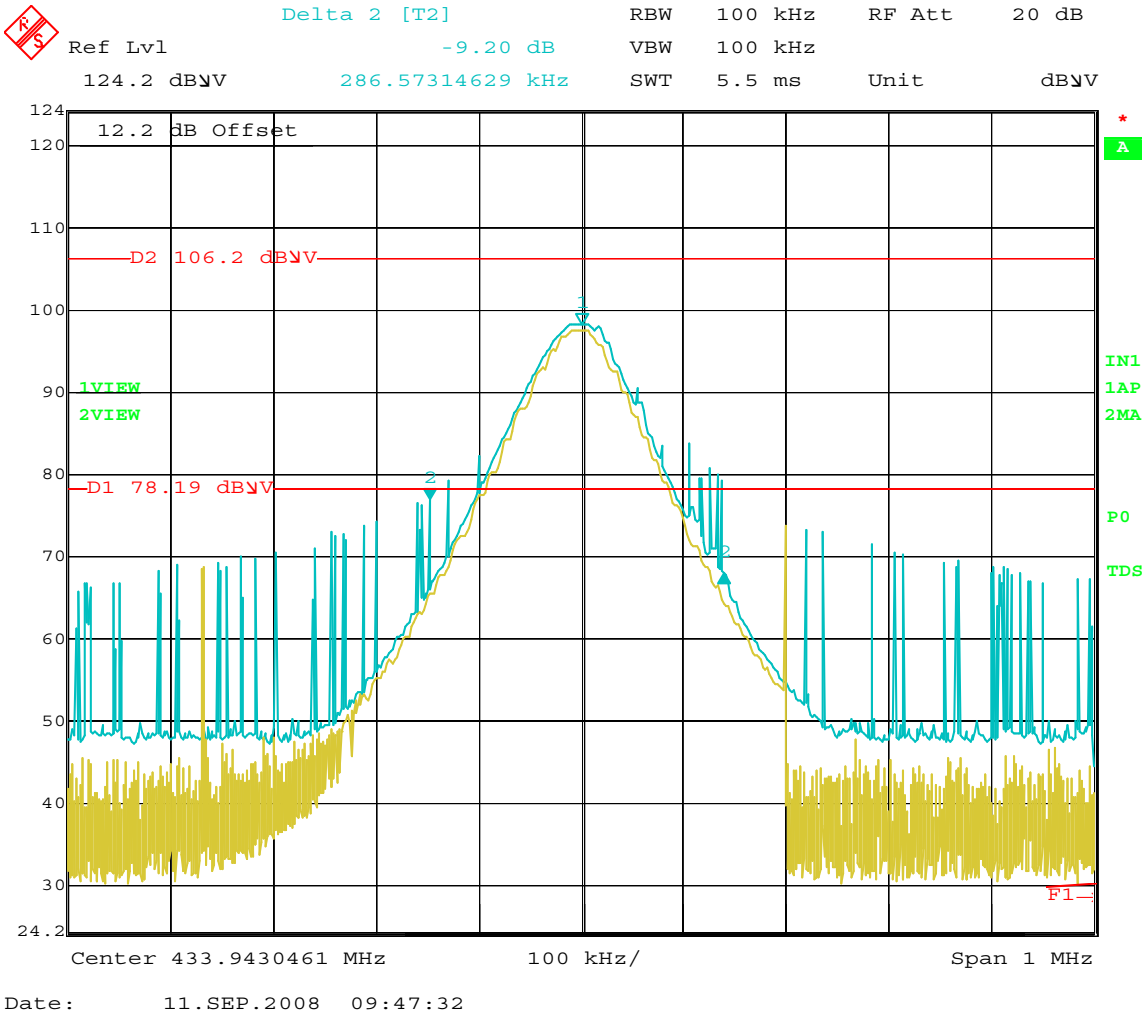
Date: 09/11/08
Lab: B/D
Tested By: Kyle Fujimoto

Z-Axis - (Worst Case)
Digital Portion and Non-Harmonic Emissions from the Transmitter

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found
								for the Digital Portion
								from the EUT from 10 kHz
								to 4.4 GHz
								No Emissions Found for the
								non-Harmonic Tx Emissions
								from the EUT from 10 kHz
								to 4.4 GHz
								Tested in Both Vertical
								and Horizontal Polarizations

-20 dB BANDWIDTH

DATA SHEET



-20 dB Bandwidth of the Fundamental