



Nemko Test Report: 5L0314RUS1

Applicant: MotorGuide

**Equipment Under Test:
(E.U.T.)** Transmitter M887649

In Accordance With: **FCC Part 15, Subpart C, 15.249**
Transmitters

Tested By: Nemko USA Inc.
802 N. Kealy
Lewisville, Texas 75057-3136

Authorized By: 
Brian Boyea, Resource Manager

Date: 26 August, 2005

EQUIPMENT: Transmitter M887649

Table Of Contents

Section 1. Summary Of Test Results 3

Section 2. General Equipment Specification 5

Section 3. Radiated Emissions..... 7

Section 4.Test Equipment List..... 11

ANNEX A TEST DIAGRAMS 12

EQUIPMENT: Transmitter M887649

Section 1. Summary Of Test Results

Manufacturer: MotorGuide

Model No.: Transmitter M887649

Serial No.: None

General: **All measurements are traceable to national standards.**

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15.249. All tests were conducted using measurement procedure ANSI C63.4-2003. Radiated Emissions were made on an open area test site.



New Submission



Production Unit



Class II Permissive Change



Pre-Production Unit

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE
TEST SPECIFICATIONS HAVE BEEN MADE.

See " Summary of Test Data".

**NVLAP LAB CODE: 100426-0**

NEMKO USA Inc. authorizes the above named company to reproduce this report provided it is reproduced in its entirety and for use by the company's employees only.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. NEMKO USA Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. This report applies only to the items tested.

EQUIPMENT: Transmitter M887649

Summary Of Test Data

NAME OF TEST	PARA. NO.	RESULT
Conducted Emissions	15.207	Not Applicable
Radiated Emissions	15.249	Complies

Footnotes For N/A's: This device is battery powered. Testing was performed using a fully charged battery.

EQUIPMENT: Transmitter M887649

Section 2. General Equipment Specification

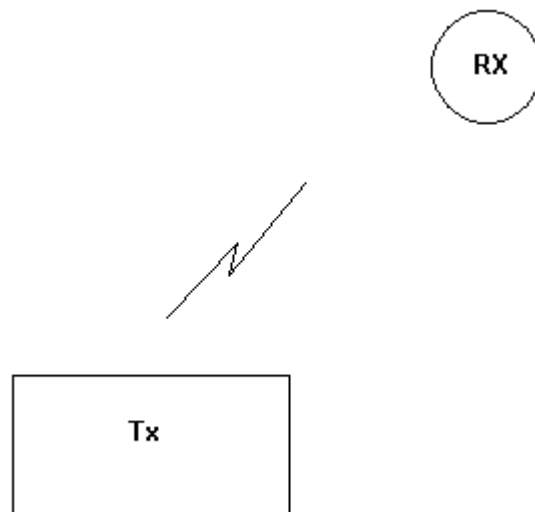
Frequency Range:	Single				
Operating Frequency(ies) of Sample:	915.2 MHz				
Tunable Bands:	N/A				
User Frequency Adjustment:	Dip Switches				
Integral Antenna	<table><tbody><tr><td>Yes</td><td>No</td></tr><tr><td>☒</td><td>☐</td></tr></tbody></table>	Yes	No	☒	☐
Yes	No				
☒	☐				

EQUIPMENT: Transmitter M887649

Description of Device Tested

Remote control for trolling motor.

System Diagram



EQUIPMENT: Transmitter M887649

Section 3. Radiated Emissions

NAME OF TEST: Radiated Emissions	PARA. NO.: 15.249
TESTED BY: David Light	DATE: 8/19/2005

Minimum Standard: Para no. 15.249

(a) The field strengths shall not exceed the following:

Fundamental (MHz)	Field Strength (mV/m)	Field Strength (dBμV)	Harmonic (mV/m)	Harmonic (dBμV)
902-928	50	94	0.5	54
2400-2483.5	50	94	0.5	54

(b) Field strength limits are specified at a distance of 3 metres.

(c) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated limits of 15.209 whichever is the less attenuation.

(d) ...for frequencies above 1000 MHz, the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

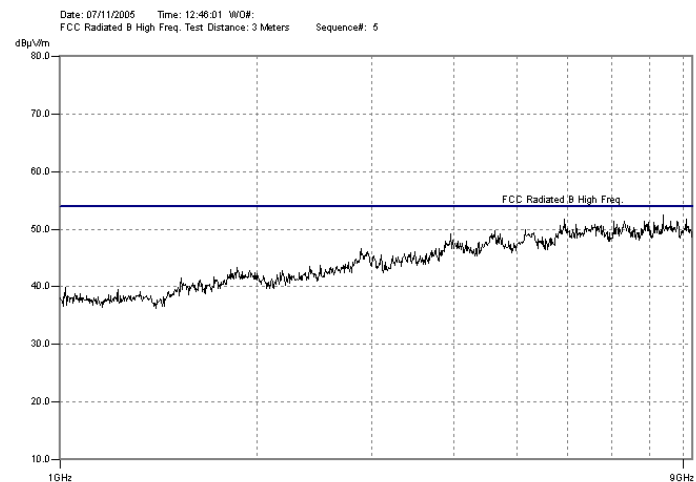
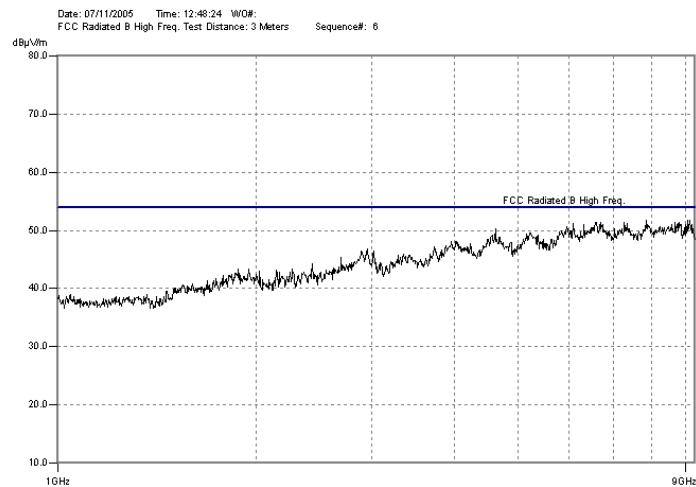
Test Results: Complies**Measurement Data:** See attached table.**Test Equipment Used:** 759-791-1484-1485-1464-1016-1304

Test Equipment Settings: RBW=1 MHz, VBW=1 MHz

EQUIPMENT: Transmitter M887649

Test Data - Radiated Emissions

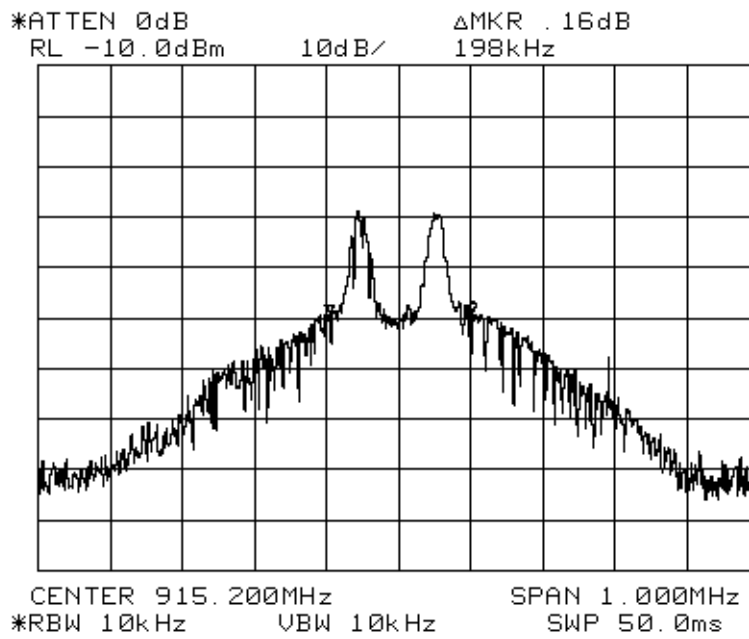
Meas. Freq. (MHz)	Ant. Pol. (H/V)	Atten. (dB)	Meter Reading (dBuV)	Antenna Factor (dB)	Path Loss (dB)	RF Gain (dB)	Corrected Reading (dBuV/m)	Spec. limit (dBuV/m)	CR/SL Diff. (dB)	Pass Fail Unc.	QP readings Comment
915.2	H	0	84.6	23.5	8.2	24.2	92.1	94.0	-1.9	Pass	
915.2	V	0	78.3	23.5	8.2	24.2	85.8	94.0	-8.2	Pass	



There were no emissions detected above the noise floor. Spectrum was searched from 30 MHz to 9200 MHz.

EQUIPMENT: Transmitter M887649

20 dB Bandwidth



EQUIPMENT: Transmitter M887649

Radiated Photographs



EQUIPMENT: Transmitter M887649

Section 4. Test Equipment List

Nemko ID	Description	Manufacturer Model Number	Serial Number	Calibration Date	Calibration Due
759	ANTENNA, LOG PERIODIC	A.H. SYSTEMS SAS-200/510	556	07/23/04	08/23/05
791	PREAMP, 25dB	ICC LNA25	398	11/12/04	11/12/05
1484	Cable 2.0-18.0 Ghz	Storm PR90-010-072	N/A	08/26/04	08/26/05
1485	Cable 2.0-18.0 Ghz	Storm PR90-010-216	N/A	08/26/04	08/26/05
1464	Spectrum analyzer	Hewlett Packard 8563E	3551A04428	01/14/05	01/15/07
1016	Pre-Amp	HEWLETT PACKARD 8449A	2749A00159	11/12/04	11/12/05
1304	HORN ANTENNA	ELECTRO METRICS RGA-60	6151	09/22/03	09/22/05

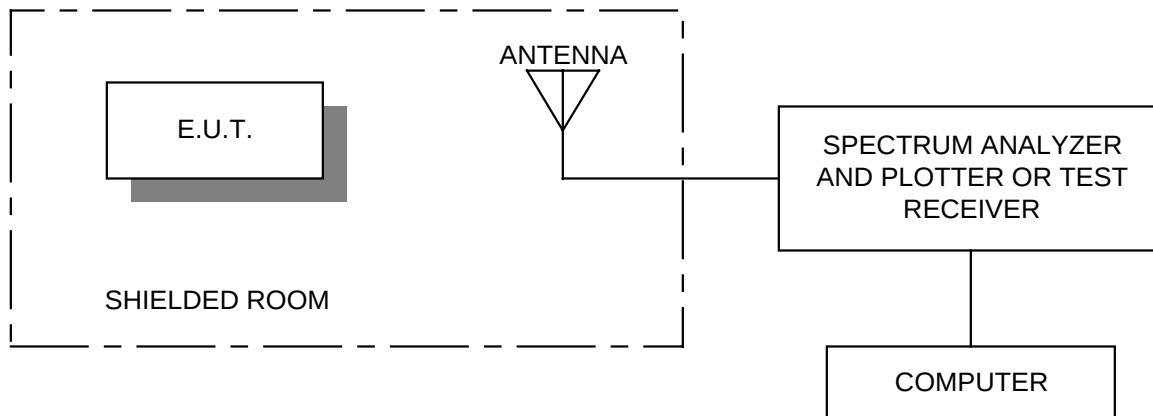
Note: Calibration was extended for 30 days on asset 759

EQUIPMENT: Transmitter M887649

ANNEX A
TEST DIAGRAMS

EQUIPMENT: Transmitter M887649

Radiated Prescan



EQUIPMENT: Transmitter M887649

Test Site For Radiated Emissions

