

# **TEST REPORT**

Report Number: 3095199MIN-003 Project Number: 3095199 April 28, 2006

# **Evaluation of the T4 Remote Control Transmitter**

# FCC ID: MMURT10400

For Remote Technologies Inc.

Test Performed by:
Intertek
7250 Hudson Blvd. Suite 100
Oakdale, MN 55128

Test Authorized by: Remote Technologies 7651 Anagram Drive Eden Prairie, MN 55344

Prepared by: \_

Uri Spector

Date: April 28, 2006

Approved by:

orman Shpilsher

Date: April 28, 2006











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#### 1.0 **GENERAL DESCRIPTION**

#### 1.1 Related Submittals Grants

This is single application of the Remote Technologies T4 Remote Control Transmitter for Certification under FCC Part 15, Subpart C.

There are no other simultaneous applications.

The Receiver portion will be verified under Declaration of Conformity.

#### 1.2 **Product Description**

T4 Remote Control Transmitter is a RF remote control operating in 433.87MHz. The intended use of the T3 Remote Control Transmitter is to generate and transmit a RF signal to control home entertainment systems. The T4 Remote Control Transmitter powered at 8.4VDC from Lithium internal rechargeable battery and 120VAC/60Hz through the charger station (docking station) with AC adaptor by BEC model: AP48120-1C8-01.

# Antenna Description:

Integrated antenna

Sample Submitted:

April 12, 2006

Test Work Started:

April 12, 2006

Test Work Completed: April 26, 2006

#### 1.3 Test Methodology

Emission measurements were performed according to the procedures in ANSI C63.4-2003. All field strength radiated emissions measurements were performed in the semi-anechoic chamber, and for each scan, the procedure for maximizing emissions in Appendices D and E were followed. All field strength radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "Justification Section" of this Application.

#### 1.4 Test Facility

The test site facility used to collect the radiated and conducted measurement data is located at 7250 Hudson Blvd., Suite 100, Oakdale, Minnesota. This test facility has been fully described in a report dated on March 2005 submitted to FCC. Please reference the site registration number: 90706, dated April 18, 2003.

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### 2.0 SYSTEM TEST CONFIGURATION

### 2.1 Justification

N/A

# 2.2 EUT Setup

For simplicity of testing, the transmitter was setup to transmit continuously

# 2.3 EUT Exercising Software

N/A

# 2.4 Special Accessories

Remote Technologies battery charger (docking station) with AC adaptor by BEC model: AP48120-1C8-01. USB port.

**Note:** According to the manufacturers' specification, the T4 remote control transmitter will not operate while it is connected to a PC's USB port. In addition, the T4 will not be able to sync with a PC's USB port while it is transmitting a command. The USB port is only used to download software (by an RTI dealer). Therefore, USB cable was not connected to the T4 remote control transmitter during testing.

No additional testing was performed on the Palm 802.11 card, since the card was already tested as intentional radiator and has FCC ID: QPUWLAN6060SD.

# 2.5 Equipment Modification

No modifications were installed during the testing.

# 2.6 Support Equipment List and Description

N/A

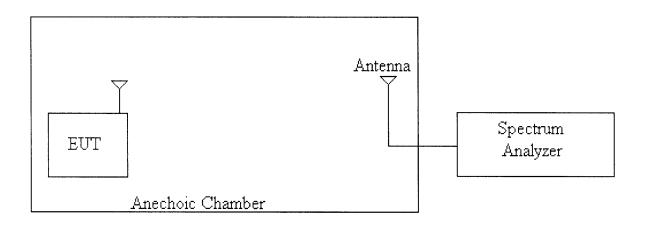


# 2.7 Test Configuration Block Diagrams

The EUT was setup as tabletop equipment.

The EUT was powered at 8.4VDC from Lithium internal rechargeable battery (the battery was fully charged prior to testing) and 120VAC/60Hz through the charger station (docking station) with AC adaptor by BEC model: AP48120-1C8-01.

# Field Strength Measurements





# 3.0 TEST RESULTS

Data is included for the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs, data tables and graphical representations of the emissions are included.

The EUT is intended for operation under the requirements of Part 15 Subpart C. Specific test requirements include the following:

47 CFR 15.231(a)(1)	Transmitting Time
47 CFR 15.231(b)	Field Strength of Fundamental and Spurious Emissions
47 CFR 15.231(c)	Bandwidth of Emissions

The EUT complied with requirements of Part 15 Subpart B:

47 CFR 15.109, Class B	Radiated Emissions
47 CFR 15.107, Class B	Line Conducted Emissions



# 3.1 Transmitting Time, FCC 15.231(a)(1)

The transmitter transmitted continuously while the activation button was pressed. According to FCC Part 15.231(a)(1) a manually operated transmitter should stop transmitting within 5 sec after release the activation button. The transmitter was deactivates automatically less then 1 sec after releasing the activation button.



# 3.2 Field Strength of Fundamental and Spurious Emissions, FCC 15.231(b)

Field Strength of Fundamental and Spurious Emissions measurements were made at Fundamental frequency of 433.87MHz; Spurious Emissions were tested up to 4.5GHz (10<sup>th</sup> harmonic).

The Tables 3-2-1 shows the Field Strength of Fundamental Radiation. The Table 3-2-2 shows Field Strength of Spurious Emissions for T4 Remote Control Transmitter.

Note: Testing was performed while the T4 Remote Control Transmitter was plugged into the charger for worst-case emissions.

Radiated Emissions

Date:

4/12/2006

Company:

Remote Technologies

Model:

T4, Remote Control Transmitter

Test Engineer:

Uri Spector

Special Config:

Tested while plugged into charger

Standard: Test Site:

FCC Part 15.231(b) 3 m Anechoic Chamber

Note:

Readings below 1GHz were taken with RBW 100kHz

Measurements were taken with CISPR Peak detector

### Table # 3-2-1

Frequency	Antenna			Amplifier	Peak Reading	Net at 3m.	Limit	Margin	Comments
MHz	Polarity	Hts(cm)	Factor(dB/m)	Gain (dB)	dBμV	$dB\mu V/m$	dBμV/m	dB	
433.875	V	170	19.1	0.0	57.3	76.4	80.8	-4.4	Fund.
433.875	H	208	19.1	0.0	59.3	78.4	80.8	-2.4	Fund.



### Radiated Emissions

Date:

4/13/2006

Company:

Remote Technologies

Model:

T4, Remote Control Transmitter

Test Engineer:

Uri Spector

Special Config:

Tested while plugged into charger

Standard:

FCC Part 15.231(b)

Test Site:

3 m Anechoic Chamber

Note:

Readings below 1GHz were taken with RBW 100kHz and above 1GHz with

RBW 1MHz

Table # 3-2-2

Frequency	Antenna	Antenna	Ant Factor	Amplifier	Peak Reading	Net at 3m.	Limit	Margin	Comments
MHz	Polarity	Hts(cm)	(dB/m)	Gain (dB)	dBμV	dBμV/m	dBμV/m	dB	
867.74	V	106	24.7	0.0	32.0	56.7	N/A	N/A	1
867.74	Н	100	24.7	0.0	39.1	63.8	N/A	N/A	1
1301.61	V	114	27.1	39.6	61.9	49.4	60.8	-11.4	
1301.61	Н	256	27.1	39.6	57.3	44.8	60.8	-16.0	
1735.48	V	119	28.8	39.0	61.3	51.1	N/A	N/A	1
1735.48	Н	164	28.8	39.0	59.5	49.3	N/A	N/A	1
2169.35	V	129	30.8	38.5	64.5	56.8	N/A	N/A	1
2169.35	Н	100	30.8	38.5	60.5	52.8	N/A	N/A	1
3470.96	V	198	35.5	37.6	55.3	53.2	N/A	N/A	1
3470.96	Н	192	35.5	37.6	60.7	58.6	N/A	N/A	1
3904.83	V	180	37.2	37.7	57.0	56.5	60.8	-4.4	
3904.83	Н	253	37.2	37.7	54.4	53.9	60.8	-6.9	
4338.70	V	169	37.3	37.7	52.8	52.4	60.8	-8.4	
4338.70	Н	135	37.3	37.7	50.7	50.3	60.8	-10.5	

Comments: 1. Frequency outside restricted bands of operation per 15.205



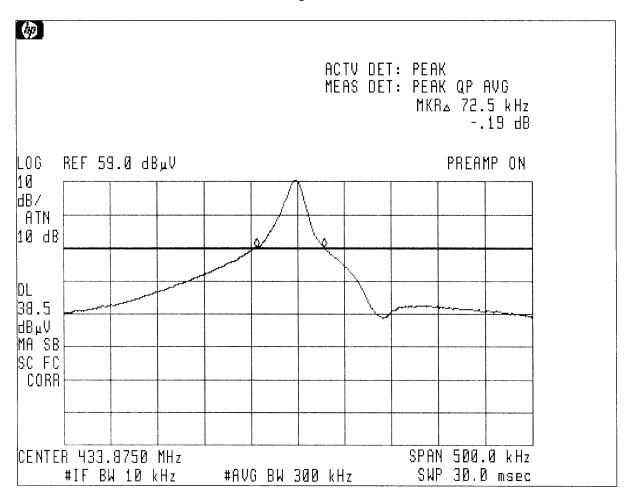
# 3.3 Bandwidth of Emissions, FCC 15.231(c)

Bandwidth of Emissions measurements was made for frequency of 433.875MHz.

Bandwidth of Emissions at -20dB level was measured at 72.5kHz. The maximum allowed level is  $433.844MHz \times 0.25\% = 1084.68kHz$ 

The #3-3-1 shows the Bandwidth of Emissions at -20dB level.

Graph 3-3-1





# 3.4 Radiated Emissions, FCC 15.109, Class B (T4 remote control transmitter)

The EUT (T4 remote control transmitter) as a digital device was tested according to FCC Part 15.109, Class B in frequency range from 30MHz to 2GHz.

The EUT was tested for FCC Part 15, Subpart B in both AC and Battery powered configurations in frequency range 30MHz to 1GHz. Tables 3-4-1 and 3-4-2 show the Field Strength of Radiated Emissions from 30MHz to 1GHz.

The EUT was tested for FCC Part 15, Subpart B in AC powered configurations in frequency range 1GHz to 2GHz. Tables 3-4-3 shows the Field Strength of Radiated Emissions from 1MHz to 2GHz.



Radiated Emissions from 30MHz to 1GHz

Date:

04-26-2006

Company:

Remote Technologies Inc.

Model:

T4 Remote Control Transmitter

Test Engineer:

Norman Shpilsher

Special Info:

AC Powered Unit Configuration

Standard:

FCC Part 15.109, Class B

Test Site:

3m Anechoic Chamber, 3m measurement distance

Note:

The table shows the worst case radiated emissions

Measurements were taken using a Peak detector, or CISPR Quasi-peak

detector (marked \*)

Table # 3-4-1

Frequency	Ant.	Reading	Ant.Factor	Total at 3m	QP Limit	Margin
	Polarity	$dB\mu V$	dB1/m	$dB\mu V/m$	$dB\mu V/m$	dB
114.57 MHz	V	17.8	13.4	31.2	43.5	-12.3
118.82 MHz	V	19.1	13.4	32.5	43.5	-11.1
130.94 MHz	V	25.8	13.0	38.8	43.5	-4.7
* 136.84 MHz	V	23.3	12.7	36.0	43.5	-7.5
139.43 MHz	V	24.5	12.5	37.1	43.5	-6.4
140.94 MHz	V	23.1	12.5	35.6	43.5	-8.0
143.07 MHz	V	23.5	12.4	35.9	43.5	-7.7
149.73 MHz	V	23.6	12.0	35.5	43.5	-8.0
199.45 MHz	V	26.9	11.5	38.5	43.5	-5.1
298.87 MHz	V	19.4	15.4	34.8	46.0	-11.3
323.73 MHz	V	16.2	16.1	32.3	46.0	-13.7
498.03 MHz	V	19.1	20.3	39.4	46.0	-6.6
522.88 MHz	V	17.8	20.4	38.2	46.0	-7.8
547.43 MHz	V	15.4	21.2	36.5	46.0	-9.5
572.59 MHz	V	19.9	21.7	41.6	46.0	-4.5
622.31 MHz	V	15.4	22.2	37.6	46.0	-8.4
33.031 MHz	Н	18.3	17.1	35.4	40.0	-4.6
* 136.84 MHz	Н	26.5	12.7	39.2	43.5	-4.3
149.73 MHz	Н	26.7	12.0	38.7	43.5	-4.8
199.45 MHz	Н	25.8	11.5	37.4	43.5	-6.1
224.3 MHz	Н	25.4	12.0	37.4	46.0	-8.6
249.16 MHz	Н	24.0	14.3	38.3	46.0	-7.8
298.87 MHz	Н	21.8	15.4	37.2	46.0	-8.8
373.74 MHz	Н	19.6	17.7	37.3	46.0	-8.7
423.15 MHz	Н	21.8	19.3	41.2	46.0	-4.9
472.87 MHz	Н	17.7	19.9	37.6	46.0	-8.4
* 497.65 MHz	Н	23.9	20.2	44.1	46.0	-1.9
522.58 MHz	Н	21.7	20.4	42.1	46.0	-3.9
572.29 MHz	Н	19.1	21.7	40.8	46.0	-5.2
796.3 MHz	Н	16.8	23.9	40.7	46.0	-5.4



Radiated Emissions from 30MHz to 1GHz

Date:

04-19-2006

Company:

Remote Technologies Inc.

Model:

T4 Remote Control Transmitter

Test Engineer:

Norman Shpilsher

Special Info:

Internal Battery Powered Unit Configuration

Standard:

FCC Part 15.109, Class B

Test Site:

3m Anechoic Chamber, 3m measurement distance The table shows the worst case radiated emissions

Note:

Measurements were taken using a Peak detector, or CISPR Quasi-peak

detector (marked \*)

Table # 3-4-2

Frequency	Ant.	Reading	Ant. Factor	Total at 3m	QP Limit	Margin
	Polarity	dΒμV	dB1/m	$dB\mu V/m$	$dB\mu V/m$	dB
30.0 MHz	V	10.8	18.9	29.7	40.0	-10.3
62.434 MHz	٧	20.0	6.8	26.8	40.0	-13.2
74.862 MHz	٧	21.8	7.5	29.3	40.0	-10.8
87.291 MHz	>	22.3	9.3	31.6	40.0	-8.4
112.15 MHz	٧	17.3	13.3	30.6	43.5	-12.9
162.16 MHz	V	19.5	11.3	30.9	43.5	-12.7
174.59 MHz	V	23.7	10.9	34.6	43.5	-8.9
187.02 MHz	V	23.8	10.7	34.5	43.5	-9.0
199.45 MHz	V	18.3	11.5	29.8	43.5	-13.7
200.96 MHz	V	17.4	11.7	29.1	43.5	-14.4
497.72 MHz	V	16.4	20.3	36.7	46.0	-9.3
522.88 MHz	V	16.1	20.4	36.5	46.0	-9.5
* 136.85 MHz	Н	23.9	12.0	36.6	43.5	-6.9
161.86 MHz	Ι	25.9	11.4	37.2	43.5	-6.3
174.59 MHz	Η	28.5	10.9	39.4	43.5	-4.2
199.45 MHz	Н	26.4	11.5	37.9	43.5	-5.6
211.88 MHz	Н	25.8	11.6	37.5	43.5	-6.1
298.87 MHz	Н	22.4	15.4	37.8	46.0	-8.3
368.59 MHz	Н	20.3	17.6	37.9	46.0	-8.1
392.84 MHz	Н	18.9	18.2	37.1	46.0	-8.9
398.3 MHz	Н	18.4	18.5	36.9	46.0	-9.1
418.0 MHz	Н	17.8	19.3	37.1	46.0	-8.9
472.87 MHz	Н	19.5	19.9	39.4	46.0	-6.6
* 497.67 MHz	Н	22.9	20.2	43.1	46.0	-2.9
516.52 MHz	Н	15.9	20.3	36.2	46.0	-9.8
522.88 MHz	Н	17.0	20.4	37.4	46.0	-8.7
572.59 MHz	Н	16.3	21.7	38.0	46.0	-8.0
796.3 MHz	Н	16.2	23.9	40.1	46.0	-5.9
* 871.08 MHz	Н	15.6	24.7	40.3	46.0	-5.7



Radiated Emissions from 1GHz to 2GHz

Date:

4/13/2006

Company:

Remote Technologies

Model:

T4 Remote Control Transmitter

Test Engineer:

Uri Spector

Special Info:

AC Powered unit configuration

Standard: Test Site:

FCC Part 15.109, Class B

Note:

3m Anechoic Chamber, 3m measurement distance The table shows the worst case radiated emissions

All measurements were taken using a Peak detector

# Table # 3-4-3

Frequency	Ant.	Reading	Ant.Factor	Total at 3m	Limit	Margin
	Polarity	$dB\mu V$	dB1/m	$dB\mu V/m$	$dB\mu V/m$	dB
1.0195 GHz	Н	14.5	26.0	40.5	54.0	-13.5
1.094 GHz	Н	13.7	26.6	40.3	54.0	-13.7
1.989 GHz	Н	10.9	33.4	44.4	54.0	-9.6
1.0195 GHz	V	14.6	26.0	40.6	54.0	-13.4
1.045 GHz	V	16.7	26.2	42.9	54.0	-11.1
1.0495 GHz	V	15.2	26.2	41.4	54.0	-12.6
1.0945 GHz	V	13.9	26.7	40.6	54.0	-13.4
1.294 GHz	V	14.7	28.5	43.1	54.0	-10.8
1.791 GHz	V	11.9	31.9	43.8	54.0	-10.2



# 3.4.1 Line Conducted Emissions, FCC 15.107

The T4 remote control transmitter as a digital device in AC powered configuration was tested according to FCC Part 15.107, Class B Line Conducted Emissions. Tables 3-4-4, 3-4-5 & Graphs ## 3-4-1, 3-4-2, 3-4-3, 3-4-4 show the Line Conducted Emissions from 150kHz to 30MHz. Testing was performed while the T4 remote control transmitter was plugged into Remote Technologies battery charger (docking station) with AC adaptor by BEC model: AP48120-1C8-01 in transmitting and standby mode of operation. Line Conducted Emissions was tested at 120 VAC/60Hz.



Conducted Emissions From 150kHz to 30MHz

Date:

04-19-2006

Company:

Remote Technologies Inc.

Model:

T4 Remote Control Transmitter

Test Engineer:

Norman Shpilsher

Special Info: Standard:

Standby mode of operation FCC Part 15.107, Class B

Note:

The table shows the worst case conducted emissions

Measurements were taken using a Peak detector

Table # 3-4-4

Line 1

Frequency	Peak	QP Limit	AVG Limit	QP Margin	AVG Margin
	$dB\mu V$	dΒμV	$\mathrm{dB}\mu\mathrm{V}$	dB	dB
151.65 KHz	40.3	65.9	55.9	-25.7	-15.7
156.02 KHz	42.3	65.7	55.7	-23.4	-13.4
158.16 KHz	40.9	65.6	55.6	-24.7	-14.7
162.53 KHz	42.5	65.3	55.3	-22.8	-12.8
167.38 KHz	41.7	65.1	55.1	-23.4	-13.4
168.93 KHz	40.7	65.0	55.0	-24.4	-14.4
171.07 KHz	41.0	64.9	54.9	-23.9	-13.9
177.48 KHz	43.4	64.6	54.6	-21.2	-11.2
180.0 KHz	43.5	64.5	54.5	-21.0	-11.0
180.88 KHz	46.0	64.5	54.5	-18.4	-8.4
182.92 KHz	44.8	64.4	54.4	-19.5	-9.5
185.63 KHz	42.0	64.2	54.2	-22.2	-12.2

Line 2

Frequency	Peak	QP Limit	AVG Limit	QP Margin	AVG Margin
	$\mathrm{dB}\mu\mathrm{V}$	dBmV	dBmV	dB	dB
153.88 KHz	41.0	65.8	55.8	-24.8	-14.8
157.19 KHz	40.6	65.6	55.6	-25.1	-15.1
160.39 KHz	41.6	65.4	55.4	-23.8	-13.8
163.69 KHz	41.9	65.3	55.3	-23.4	-13.4
166.8 KHz	40.1	65.1	55.1	-25.1	-15.1
170.2 KHz	42.0	65.0	55.0	-23.0	-13.0
174.57 KHz	38.7	64.7	54.7	-26.1	-16.1
176.6 KHz	40.3	64.6	54.6	-24.3	-14.3
180.68 KHz	42.7	64.5	54.5	-21.8	-11.8
182.04 KHz	43.5	64.4	54.4	-20.9	-10.9
185.05 KHz	41.7	64.3	54.3	-22.6	-12.6
190.06 KHz	38.9	64.0	54.0	-25.1	-15.1



Conducted Emissions From 150kHz to 30MHz

Date:

04-19-2006

Company:

Remote Technologies Inc.

Model:

T4 Remote Control Transmitter

Test Engineer:

Norman Shpilsher

Special Info:

Transmitting mode of operation

Standard:

FCC Part 15.107, Class B

Note:

The table shows the worst case conducted emissions Measurements were taken using a Peak detector

# Table # 3-4-5

Line 1

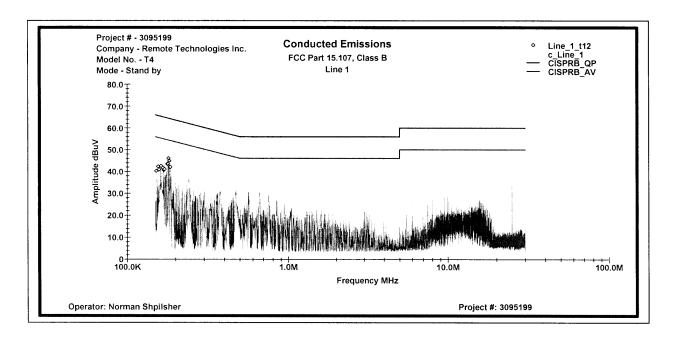
Frequency	Peak	QP Limit	AVG Limit	QP Margin	AVG Margin
	$\mathrm{dB}\mu\mathrm{V}$	$dB\mu V$	$dB\mu V$	dB	dB
150.29 KHz	44.7	66.0	56.0	-21.3	-11.3
152.43 KHz	41.7	65.9	55.9	-24.2	-14.2
154.47 KHz	42.7	65.8	55.8	-23.0	-13.0
160.97 KHz	43.4	65.4	55.4	-22.0	-12.0
163.3 KHz	40.9	65.3	55.3	-24.4	-14.4
169.71 KHz	41.7	65.0	55.0	-23.3	-13.3
171.75 KHz	43.4	64.9	54.9	-21.5	-11.5
176.12 KHz	41.0	64.7	54.7	-23.7	-13.7
178.16 KHz	44.0	64.6	54.6	-20.6	-10.6
180.29 KHz	45.7	64.5	54.5	-18.8	-8.8
181.65 KHz	46.5	64.4	54.4	-17.9	-7.9
184.76 KHz	45.5	64.3	54.3	-18.8	-8.8

Line 2

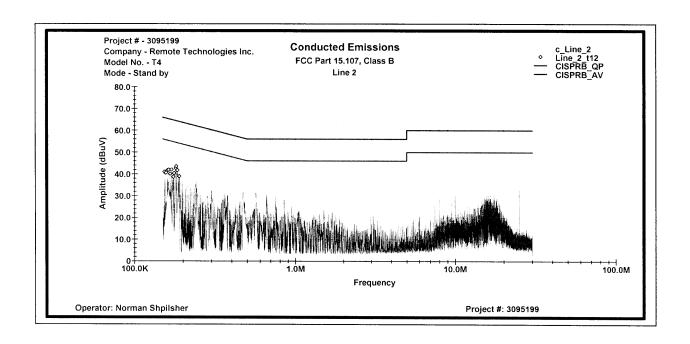
Frequency	Peak	QP Limit	AVG Limit	QP Margin	AVG Margin
	$\mathrm{dB}\mu\mathrm{V}$	dBmV	dBmV	dB	dB
151.65 KHz	41.5	65.9	55.9	-24.5	-14.5
152.91 KHz	38.9	65.8	55.8	-27.0	-17.0
159.42 KHz	42.5	65.5	55.5	-23.0	-13.0
164.66 KHz	44.4	65.2	55.2	-20.8	-10.8
165.92 KHz	43.6	65.2	55.2	-21.5	-11.5
167.96 KHz	40.8	65.1	55.1	-24.3	-14.3
171.07 KHz	39.5	64.9	54.9	-25.4	-15.4
173.21 KHz	40.7	64.8	54.8	-24.1	-14.1
178.35 KHz	43.2	64.6	54.6	-21.3	-11.3
180.0 KHz	44.8	64.5	54.5	-19.6	-9.6
183.11 KHz	45.4	64.3	54.3	-19.0	-9.0
187.38 KHz	42.2	64.2	54.2	-21.9	-11.9



Graph # 3-4-1

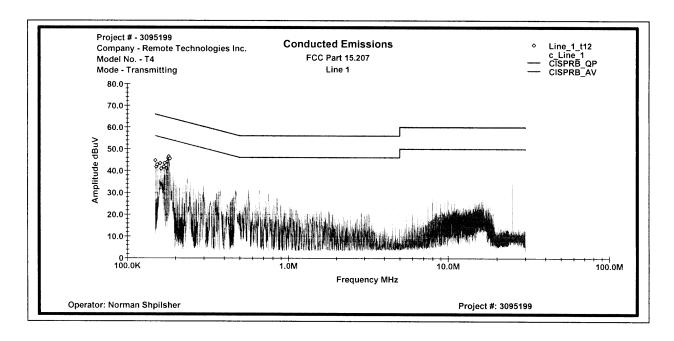


Graph # 3-4-2

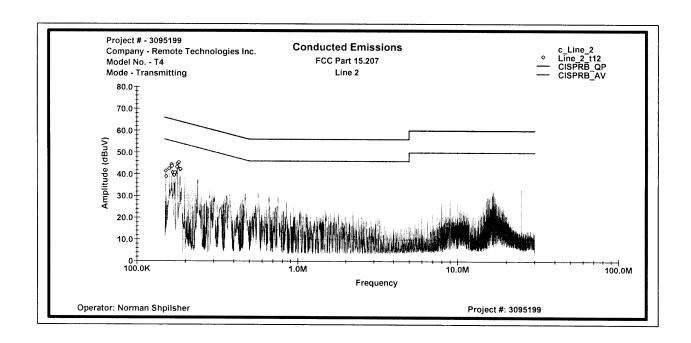




Graph # 3-4-3



Graph # 3-4-4





# 3.5 Test Procedure

# Field Strength Measurements

The EUT was placed on a non-conductive table 0.8m above the ground plane inside the Anechoic Chamber. The table was centered on a motorized turntable, which allows 360-degree rotation. The measurement antenna was positioned at 3m distance. The Bicono-Log antenna was used in frequency range from 30MHz to 1GHz, and the Horn antenna was used in frequency range above 1GHz. The radiated emissions were maximized by configuring the EUT through its placement in three orthogonal axes, by rotating the EUT, by changing antenna polarization, and by changing antenna height from 1 to 4m. Method of the direct Field Strength Calculation is shown in Section 3.6.



## 3.6 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured emissions reading on the EMI Receiver.

The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

Where: FS = Field Strength in  $dB(\mu V/m)$ 

 $RA = Receiver Amplitude in dB(\mu V)$ 

CF = Cable Attenuation Factor in dB

 $AF = Antenna Factor in dB(m^{-1})$ 

AG = Amplifier Gain in dB

Assume a receiver reading of 48.1 dB( $\mu$ V) is obtained. The antenna factor of 7.4 dB(m<sup>-1</sup>) and cable factor of 1.6 dB is added and amplifier gain of 16.0 dB is subtracted giving field strength of 41.1 dB( $\mu$ V/m).

$$RA = 48.1 \, dB(\mu V)$$

$$AF = 7.4 dB(m^{-1})$$

$$CF = 1.6 dB$$

$$AG = 16.0 dB$$

$$FS = RA + AF + CF - AG$$

$$FS = 48.1 + 7.4 + 1.6 - 16.0$$

$$FS = 41.1 dB(\mu V/m)$$

In the tables the Cable correction factors are included to the Antenna Factors.

Tested by:

Uri Spector

**EMC** Project Engineer

Intertek ETL SEMKO

Signature

Date: April 28, 2006



# 4.0 TEST EQUIPMENT

Receivers/Spectrum Analyzers

DESCRIPTION	SERIAL NO.	LAST CAL	CAL DUE	USED
HP85462A Receiver RF Section	3325A00106	03/06	03/07	X
HP85460A RF Filter Section	3330A00109	03/06	03/07	X
Rohde & Schwarz FSP 40 Spectrum Analyzer	100024	08/05	08/06	X
TILE! Instrument Control System	ver. 3.4.K.7	N/A	N/A	X

Antennas/Pre-Amplifiers

DESCRIPTION	SERIAL NO.	LAST CAL	CAL DUE	USED
Schaffner-Chase Bicono-Log Antenna	2468	01/06	01/07	X
EMCO Horn Antenna 3115	6579	02/06	02/07	X
Miteq AMF-5D Pre-Amplifier	1122951	02/06	02/07	Х

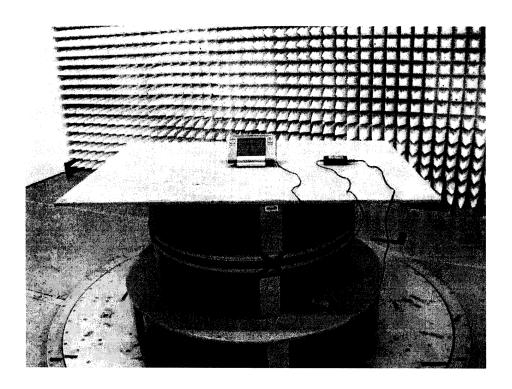
# Artificial Mains Networks/Absorbing Clamps

DESCRIPTION	SERIAL NO.	LAST CAL	CAL DUE	USED
FCC LISN-2	316	03/06	03/07	X

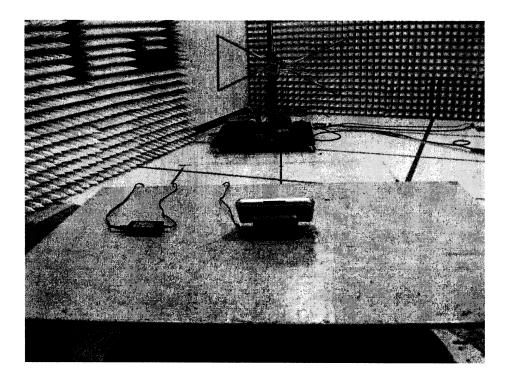


# EXHIBIT 1 CONFIGURATION PHOTOS

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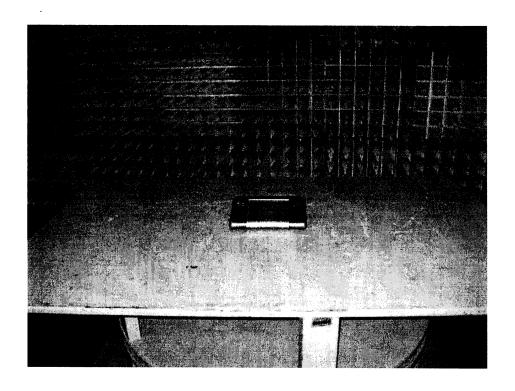


Radiated Emissions Test Configuration (T4 Remote Control Transmitter)

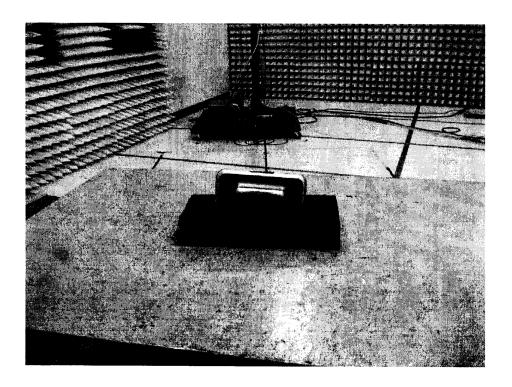


Radiated Emissions Test Configuration (T4 Remote Control Transmitter)

# Intertek ETL SEMKO

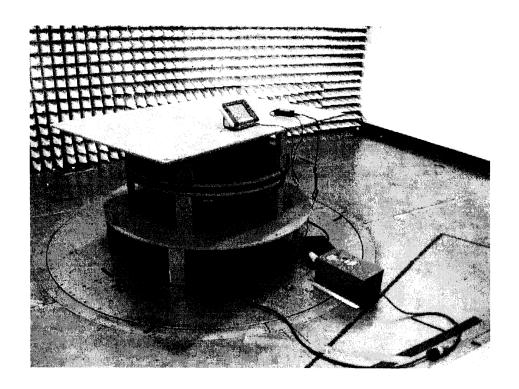


Radiated Emissions Test Configuration (T4 Remote Control Transmitter)

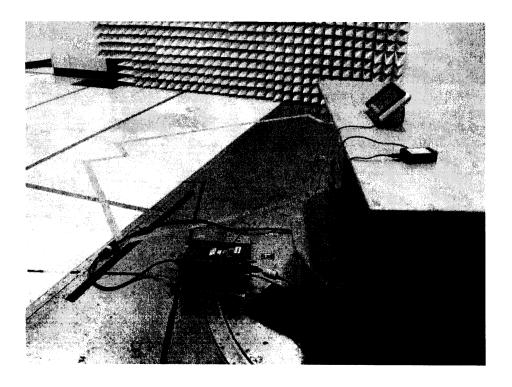


Radiated Emissions Test Configuration (T4 Remote Control Transmitter)

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Line Conducted Emissions Test Configuration (T4 Remote Control Transmitter)



Line Conducted Emissions Test Configuration (T4 Remote Control Transmitter)