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## RF Exposure Evaluation Report

<b>APPLICANT</b>	VERDANT ENVIRONMENTAL TECHNOLOGIES
	1850 55E AVENUE LACHINE QUEBEC H8T 3J5 CANADA
<b>FCC ID</b>	XEYWX
<b>IC</b>	8410A-WX
<b>MODEL NUMBER</b>	WX, VX
<b>PRODUCT DESCRIPTION</b>	THERMOSTAT
<b>STANDARD APPLIED</b>	CFR 47 Part 2.1091
<b>PREPARED BY</b>	Tim Royer

We, TIMCO ENGINEERING, INC. would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091 and ISED RSS-102 and meets the requirements.

The attached report shall not be reproduced except in full without the written approval of TIMCO ENGINEERING, INC.

## GENERAL REMARKS

### Attestations

This equipment has been evaluated in accordance with the standards identified in this report. To the best of my knowledge and belief, these evaluations were performed using the procedures described in this report.

I attest that the necessary evaluations were made, under my supervision, at:

**Timco Engineering Inc.**  
**849 NW State Road 45**  
**Newberry, FL 32669**



**Authorized Signatory Name:**

Tim Royer, Engineer

**Date: 11/6/2017**

Applicant: VERDANT ENVIRONMENTAL TECHNOLOGIES  
FCC ID: XEYWX  
IC: 8410A-WX  
Report: 871YAUT17 RF Exp MPE Rpt.DOCX

## RF Exposure Requirements

### General information

Device type: THERMOSTAT

### Antenna

Configuration	Antenna p/n	Type	Max. Gain (dBi)
Fixed mounted	Any	Wave	2.15

### Operating configuration and exposure conditions:

The conducted output power is shown in the table below. Typical use qualifies for a maximum duty cycle factor of 100%.

### MPE Calculation:

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power density: } P_d(mW/cm^2) = \frac{E^2}{3770}$$

The limit for general uncontrolled exposure environment is shown in FCC rule Part 1.11310, Table 1 and ISSED RSS-102 § 4 Table 3.

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**Minimum Separation Distance for Mobile or Fixed Devices  
General Population/Uncontrolled Exposure**

**Insert values in yellow highlighted boxes to determine Minimum Separation Distance**

Max Power	0.00443	W	<i>equals</i>	Max Power	4.43	mW
Duty Cycle	100	%	<i>equals</i>	Duty Factor	1	numeric
Antenna Gain	2.15	dBi	<i>equals</i>	Gain numeric	1.64059	numeric
Coax Loss	0	dB		Gain - Coax Loss	1.64059	numeric
Power Density	0.6	mW/cm <sup>2</sup>				
Frequency	928	MHz				

**Enter power Density from the chart to the right**

**Rule Part 1.1310, Table 1 (B)**

Frequency range	Power den	Enter this value
MHz	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>
0.3-1.34	100	100
1.34-30	180/f <sup>2</sup>	0.0
30-300	0.2	0.2
300-1,500	f/1500	0.6
1,500-100,000	1	1

f = frequency in MHz

<b>Minimum Separation Distance</b>	<b>1 cm</b>	<b>0.01 m</b>
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Minimum Separation in Inches      0.386239 Inches

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