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RF Exposure Evaluation Report

APPLI CANT	Enterprise Electronics Corporation
	128 South Industrial Blvd. Enterprise Alabama 36330 USA
FCC I D	BUVRANGERX5
MODEL NUMBER	RANGER X5
PRODUCT DESCRIPTION	Ranger-X5 RADAR
STANDARD APPLIED	CFR 47 Part 2.1091
PREPARED BY	Cory Leverett

We, TIMCO ENGINEERING, INC. would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091 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:

Cory Leverett,
Engineering Project Manager

Date: 3/ 10/ 2017

RF Exposure Requirements

General information

Device type: Ranger-X5 RADAR

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.

Applicant: Enterprise Electronics Corporation

FCC ID: BUVRANGERX5

Report: V:\E\ENTERPRISE\214AUT17\EXTRA214AUT17\214AUT17RF EXP MPE
RPT_REV2.DOCX

**Minimum Separation Distance for Mobile or Fixed Devices
Controlled Exposure**

Insert values in yellow highlighted boxes to determine Minimum Separation Distance

Max Power	1200	W	<i>equals</i>	Max Power	1200000	mW
Duty Cycle	1	%	<i>equals</i>	Duty Factor	0.01	numeric
Antenna Gain	45	dBi	<i>equals</i>	Gain numeric	31622.7766	numeric
Waveguide Loss	0.8	dB		Gain - Coax Loss	26332.97944	numeric
Power Density	5	mW/cm ²				
Enter power Density from the chart to the right						
Frequency	9275	MHz				

Rule Part 1.1310, Table 1 (A)

Freq range	Power density	Enter this value
MHz	mW/cm ²	mW/cm ²
0.3 - 3	100	100
3 - 30	900/f ²	0.0
30-300	1	1
300-1,500	f/300	30.9
1,500-100,000	5	5

f = frequency in MHz

Minimum Separation Distance	2243 cm	22.43 m
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Minimum Separation in Inches 882.2365 Inches