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## RF Exposure Evaluation Report

<b>APPLICANT</b>	UNIDEN AMERICA CORPORATION
	3001 GATEWAY DRIVE SUITE 130 IRVING TEXAS 75063 USA
<b>FCC ID</b>	AMWUT416
<b>IC</b>	513C-UT416
<b>MODEL NUMBER</b>	BEAR TRACKER 885
<b>PRODUCT DESCRIPTION</b>	CB RADIO WITH SCANNING RECEIVER
<b>STANDARD APPLIED</b>	CFR 47 Part 2.1091
<b>PREPARED BY</b>	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: April 17, 2017**

Applicant: UNIDEN AMERICA CORPORATION  
FCC ID: AMWUT416  
IC: 513C-UT416  
Report: 422AUT17RF Exp MPE Rpt

## RF Exposure Requirements

### General information

Device type: CB RADIO WITH SCANNING RECEIVER

### Antenna

The manufacturer does not specify an antenna, but a typical antenna has a gain of 0 dBi.

Configuration	Antenna p/n	Type	Max. Gain (dBi)
Fixed mounted	Any	Whip	3 dBi

### 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.

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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	<b>4</b> W	<i>equals</i>	Max Power	4000	mW
Duty Cycle	<b>100</b> %	<i>equals</i>	Duty Factor	<b>1</b>	numeric
Antenna Gain	<b>3</b> dBi	<i>equals</i>	Gain numeric	1.995262	numeric
Coax Loss	<b>0</b> dB		Gain - Coax Los	1.995262	numeric
Power Density	<b>0.2</b> mW/cm <sup>2</sup>				
Frequency	<b>27</b> MHz				

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

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

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

f = frequency in MHz

<b>Minimum Separation Distance</b>	<b>56 cm</b>	<b>0.56 m</b>
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Minimum Separation in Inches      22.16891 Inches

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