TIMCO ENGINEERING, Inc.
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RF Exposure Evaluation Report

APPLICANT	MIDLAND RADIO CORPORATION
	5900 PARRETTA DRIVE KANSAS CITY MISSOURI 64120-2134 USA
FCC ID	MMA88182
MODEL NUMBER	88182
PRODUCT DESCRIPTION	CB TRANSCEIVER
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.

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: 12/8/2016

RF Exposure Requirements

General information

Device type: CB TRANSCEIVER

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	omni	3 dBi

MPE Calculation:

The minimum separation distance is calculated as follows:

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

The limit for general uncontrolled exposure environment is shown in FCC rule Part 1.11310, Table 1.

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Insert values in yellow highlighted boxes to determine Minimum Separation Distance

Max Power	3.883	W	*equals*	Max Power	3883	mW
Duty Cycle	100	%	*equals*	Duty Factor	1	numeric
Antenna Gain	3	dBi	*equals*	Gain numeric	1.995262	numeric
Coax Loss	0	dB		Gain - Coax Los	1.995262	numeric
Power Density	0.2	mW/cm^2				

Enter power Density from the chart to the right

Frequency	27.405	MHz

Rule Part 1.1310, Table 1 (B)

Frequency ran	Power den	Enter this value
MHz	**mW/cm^2**	**mW/cm^2**
0.3-1.34	100	**100**
1.34-30	$180/f^2$	**0.2**
30-300	0.2	**0.2**
300-1,500	f/1500	**0.0**
1,500-100,000	1	**1**

f = frequency in MHz

Minimum Separation Distance	**56 cm**	**0.56 m**

Minimum Seperation in Inches	21.84229	Inches