PHONE: 888.472.2424 OR 352.472.5500 EMAIL: <u>INFO@TIMCOENGR.COM</u>

WEB: <u>HTTP://WWW.TIMCOENGR.COM</u>



# **RF Exposure Evaluation Report**

APPLICANT	TPL SYSTEMES	
ADDRESS	ZAE du Perigord Noir Sarlat La 24200 FRANCE	
FCC ID	2ATEXDM3G40GPS	
MODEL NUMBER	DM3G40GPS	
PRODUCT DESCRIPTION	PLMR RADIO	
DATE SAMPLE RECEIVED	07/11/2019	
FINAL TEST DATE	08/02/2019	
PREPARED BY	Franklin Rose	
TEST RESULTS	□ PASS    □ FAIL	

Report Number	Report Version	Description	Issue Date
1774AUT19 MPE_TestReport_	Rev1	Initial Issue	08/02/2019
	Rev2	Updated General Information per customer request	12/02/2019

THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.



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#### **GENERAL REMARKS**

#### Summary

The device under test does:

Fulfill the general approval requirements as identified in this test report and was selected by the customer.
Not fulfill the general approval requirements as identified in this test report

#### **Attestations**

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

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made at:

Timco Engineering Inc. 849 NW State Road 45 Newberry, FL 32669 Designation #: US1070

Prepared by:



Name and Title Franklin Rose, Project Manager / EMC Specialist

**Date** 08/02/2019

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#### **GENERAL INFORMATION**

EUT Description	PLMR RADIO		
Model Number	DM3G40GPS		
EUT Power Source	□110-120Vac, 50- 60Hz	☑ DC Power	☐ Battery Operated
Test Item	☐ Engineering Prototype		☐ Production
Type of Equipment	☐ Fixed	⊠ Mobile	☐ Portable
Antenna Connector	external BNC		
Test Conditions	The temperature was 26°C Relative humidity of 50%.		
Modification to the EUT	No Modification to EUT.		
Applicable Standards	FCC CFR 47 Part 2.1091		
Test Facility	Timco Engineering Inc. at 849 NW State Road 45 Newberry, FL 32669 USA. Designation #: US1070		

#### **ANTENNA INFORMATION**

Manufacturer Provides Antenna	Туре	Max Gain (dBi)
No	Unspecified	0 dBi

#### **POWER OUTPUT OF EUT**

	Frequency	Measurement (dBm)	Measurement (W)	Rated Output (W)
Γ	33.02	46.83	48.19	50.00

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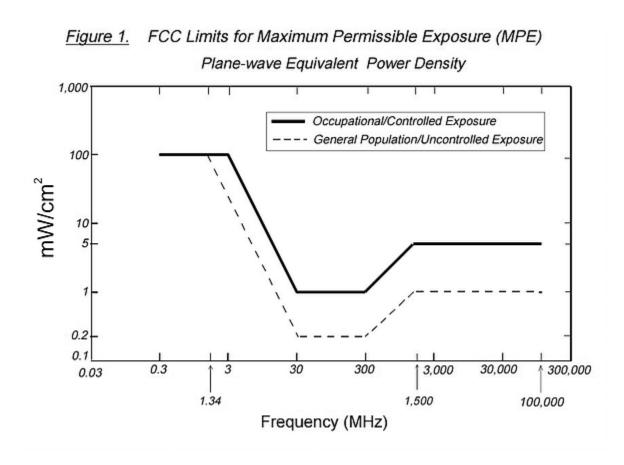


#### MPE CALCULATION

The minimum separation distance is calculated as follows:

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

#### **MPE LIMITS**



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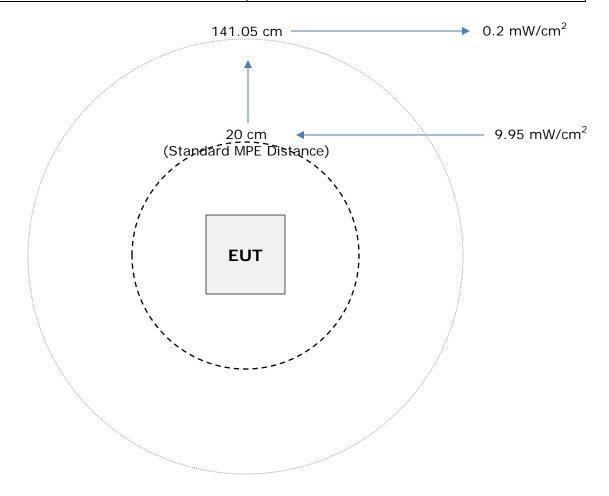


#### **MPE Table**

### **General Uncontrolled Exposure**

The limit for General Uncontrolled Exposure Environment is calculated as shown in FCC Pt. 1.1310, Table B:

Variable	Value
Max Power	50.0 W
Frequency Range	33.0 - 49.6 MHz
Duty Cycle (at full power)	100%
Max Antenna Gain	0 dBi
Coax Loss	0 dB
Power Density	0.2 mW/cm <sup>2</sup>
Minimum Separation Distance	141.05 cm



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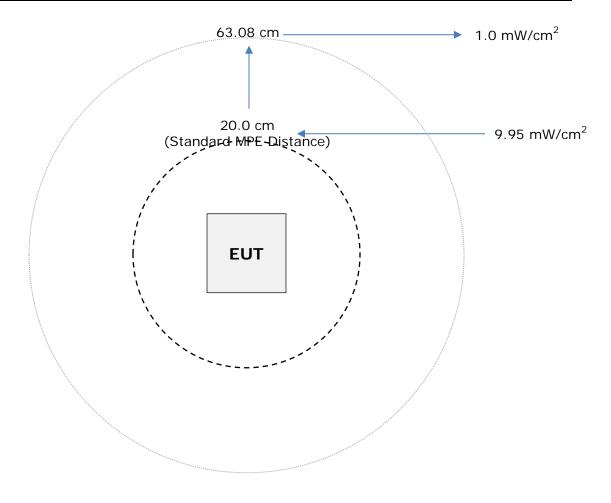
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## **General Controlled Exposure**

The limit for General Controlled Exposure Environment is calculated as shown in FCC Pt. 1.1310, Table A:

Variable	Value
Max Power	50.0 W
Frequency Range	33.0 - 49.6 MHz
Duty Cycle (at full power)	100%
Max Antenna Gain	0 dBi
Coax Loss	0 dB
Power Density	1.0 mW/cm <sup>2</sup>
Minimum Separation Distance	63.08 cm



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