



RF Exposure Evaluation Report

APPLICANT	SHENZHEN CONSTANT ELECTRONICS CO., LTD
ADDRESS	F5, NO. 2 BLDG., EAST BRIGHT INDUSTRY REGION NO. 83 DABAO ROAD BAO'AN 33 DISTRICT SHENZHEN, GUANGDONG CHINA
FCC ID	WH2-2611D
MODEL NUMBER	MMC-2611D
PRODUCT DESCRIPTION	PAGING TRANSCEIVER
DATE SAMPLE RECEIVED	09/18/2019
FINAL TEST DATE	4/14/2020
PREPARED BY	Franklin Rose
TEST RESULTS	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

Report Number	Report Version	Description	Issue Date
2508AUT19 MPETestReport	Rev1	Initial Issue	4/14/2020

**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 Testing Technician
Date	4/14/2020

GENERAL INFORMATION

EUT Description	PAGING TRANSCEIVER		
Model Number	2611D		
EUT Power Source	<input type="checkbox"/> 110-120Vac, 50-60Hz	<input checked="" type="checkbox"/> DC Power (12 VDC)	<input type="checkbox"/> Battery Operated
Test Item	<input type="checkbox"/> Engineering Prototype	<input checked="" type="checkbox"/> Pre-Production	<input type="checkbox"/> Production
Type of Equipment	<input checked="" type="checkbox"/> Fixed	<input type="checkbox"/> Mobile	<input type="checkbox"/> Portable
Antenna Connector	External, BNC Type		
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

Antenna is Provided	Type	Max Gain (dBi)
YES	Whip/monopole	0.0

RF POWER OUTPUT

Frequency (MHz)	Output Power (dBm)	Output Power (W)
462.75	27.44	0.56

MPE DISTANCE

Uncontrolled Public RF Exposure/MPE Guideline

Separation Distance (cm)	20 cm
Power Density (mW/cm ²)	0.119 mW/cm ²

Controlled Occupational RF Exposure/MPE Guideline

Separation Distance (cm)	20 cm
Power Density (mW/cm ²)	0.119 mW/cm ²

MPE CALCULATION

EUT Parameters

Parameter	Value	Unit
EUT Form Factor	Fixed	
Lowest Frequency	462.750	MHz
Highest Frequency	462.925	MHz
Maximum Power	0.500	W
Tune Up Tolerance	0.100	+/- W
Duty Cycle	100%	%
Antenna Gain	0.000	dBi EIRP
Coax Loss	0.000	dB
EIRP	0.600	W

Calculations

RF Exposure Field Strength Limits

Public Persons may be exposed up to:

Worst-Case RF Field Strength Limit for the General Public (Uncontrolled Environment)	0.309 mW/cm ²
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Occupational Persons may be exposed up to:

Worst-Case RF Field Strength Limit for Controlled Use (Controlled Environment)	1.543 mW/cm ²
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Separation Distance

Mandatory distance from radiating element:

Calculation Method	Distance from Radiating Element (cm) = $\text{SQRT}(\text{P(mW}) / 4\pi \text{S(mW/cm}^2\text{)})$
Uncontrolled Sep. Distance @ 0.309 mW/cm ²	12.44 cm
Controlled Sep. Distance @ 1.543 mW/cm ²	5.56 cm

EUT Power Density at 20 cm

Calculation Method	Power Density (mW/cm ²) = $\text{P(mW}) / 4\pi \text{R(cm}^2\text{)}$
EUT Power Density @ 20 cm	0.119 mW/cm ²