TIMCO ENGINEERING, Inc.

An IIA Company

Test Report - FCC Part 1.1310/ MPE
Applicant: Universal City Development Partners, Ltd.

Table of Contents

1. Applicant Information

Applicant: Universal City Development Partners, Ltd.
Address: 300 New Jersey Avenue NW, Suite 700
Washington, District of Columbia, 20001
United States

2. Location of Testing

2.1 Test Laboratory

Timco Engineering Inc. is a subsidiary of Industrial Inspection & Analysis, Inc. ("IIA"). Testing was performed at IIA's permanent laboratory located at 13146 NW 86th Drive, Suite 400, Alachua, Florida 32615.

FCC test firm # 578780
FCC Designation # US1070
FCC site registration is under A2LA certificate # 0955.01
ISED Canada test site registration # 2056A
EU Notified Body # 1177
For all designations see A2LA scope # 0955.01

2.2 Testing was performed, reviewed by

Dates of Testing: 08/15/2023 – 08/21/2023

The device was prototyped and tested over a year ago, but there was not a need for production until the project was greenlit, which was delayed further than expected. The data taken two years ago is still representative of the device today

Signature:  Sr. EMC Engineer EMC-003838-NE

Name & Title: Tim Royer, EMC Engineer

Date of Signature 9/11/2025

3. Test Sample(s) (EUT/DUT)

The test sample was received: 08/14/2023

3.1 Description of the EUT

A description as well as unambiguous identification of the EUT(s) tested. Where more than one sample is required for technical reasons (such as the use of connected units for the purpose of conducted output power testing where the product units will have integral antennas), each specific test shall identify which unit was tested.

Identification	
FCC ID:	2BCG5-ITP-15
Brief Description	Themed entertainment Edge Computing and Interface Device
Model(s) #	ITP 1.5
Firmware version	N/A
Software version	The ITP 1.5s / Software Version: D3-0.1.0
Serial Number	40544

Technical Characteristics	
Frequency Range	902.75-927.75 MHz
RF O/P Power (Max.)	23.7 dBm / 0.23 W
Modulation	GFSK
Bandwidth & Emission Class	71.1 MHz / (FID)
Number of Channels	50
Duty Cycle	100%
Antenna Connector	SMA
Voltage Rating (AC or Batt.)	Unit is supplied with DC Voltage via IEEE 802.3bt, Power Over Ethernet ++ (which varies between 44VDC to 57VDC)

Antenna Characteristics			
Antenna	Frequency Range	Mode / BW	Antenna Gain
1 – Internal 2.3 linear	n/a	n/a	1.45 dBi

- Note: Information such as antenna gain, firmware/software numbers are provided by manufacturer and cannot be validated by the test lab.

4. Test methods & Applicable Regulatory Limits

4.1 Test methods/Standards/Guidance:

The following guidance FCC KDB 447498 D04 General RF Exposure Guidance v06 was used for RF exposure evaluation as per FCC Part 1.1310 and FCC Part 2.1091 and part 2.1093. Full test results are available in this report.

4.1.1 FCC Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging Time (minutes)
A Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*($900/f^2$)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
B Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*($180/f^2$)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

4.2 Equations

POWER DENSITY

E(V/m) = SQRT (30 * P * G) / d

Pd(W/m^2) = E^2 / 377

S = EIRP / (4 * Pi * D^2v)

Where:

S = Power density, in mW/cm^2
EIRP = Equivalent Isotropic Radiated Power, in mW
D = Separation distance in cm

Power density is converted from units of mW/cm^2 to units of W/m^2 by multiplying by 10.

DISTANCE

D = SQRT (EIRP / (4 * Pi * S))

Where:

D = Separation distance in cm
EIRP = Equivalent Isotropic Radiated Power, in mW
S = Power density in mW/cm^2

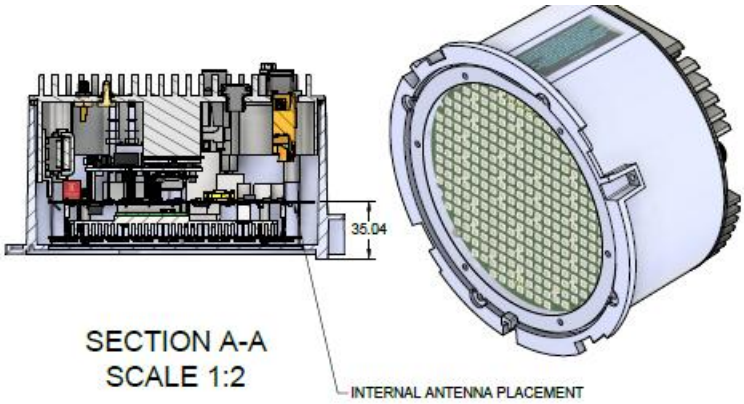
SOURCE-BASED DUTY CYCLE (When applicable (for example, multi-slot mobile phone applications) A duty cycle factor may be applied.)

Source-based time-average EIRP = (DC / 100) * EIRP

Where:

DC = Duty Cycle in % as applicable.
EIRP = Equivalent Isotropic radiated Power, in mW

5. RF Exposure Results



d (cm):	*3.50*		
ERP_{20}:	*4600.2*		
x:	*1.46*		
P_{th}(mW):	***358.40***	(exposure limit)	**Ratio**
TL EIRP:	***27.69 dBm***	**(587.98 mW)**	**0.546**
TL ERP:	***25.54 dBm***	**(358.40 mW)**	**0.333**
ERP (mW):	***195.83***	***Yes!***	
Ratio	***0.55***		

SAR Exclusion
SAR EXEMPT

RESULT: Pass at DISTANCE 35.4 mm

6. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_9607-23_FCC 1.1310/ MPE_	1	Initial release	11/03/2023
	2	Updated pages 5 & 8	9/4/2024
	3	Updated page 8	6/19/2025
	4	Updated Pgs 4,8	9/11/2025

END OF TEST REPORT