Test Report

Prepared for: Houston Radar LLC

Model: PX150

FCC ID: TIAPX150

Serial Number: ae971f489b0

Project No: p2450014

Test Results: Pass

To

FCC Part 1.1310

Date of Issue: April 19, 2025

On the behalf of the applicant:	**Houston Radar LLC** **702 Julie Rivers Drive** **Sugar Land, Texas 77478**
Attention of:	**Jake Bailey** **Ph: (832) 540-6611** **E-Mail: jake@houston-radar.com**
Prepared By:	**Compliance Testing, LLC** **Mesa, AZ 85204** **(480) 926-3100 phone / (480) 926-3598 fax** **www.compliancetesting.com** **ANAB Cert#: AT-2901** **FCC Site Reg. #US2901** **ISED Site Reg. #2044A-2**

Greg Corbin
Project Test Engineer

Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	4/19/2025	Greg Corbin	Original Document
2.0	5/27/25	Greg Corbin	Corrected FCC rule section and CTL test report reference in the test data section of page 5.

ANAB

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to the joint ISO-ILAC-IAF Communiqué dated January 2009).

The tests results contained within this test report all fall within our scope of accreditation, unless noted below.

Please refer to http://www.compliancetesting.com/labscope.html for current scope of accreditation.

FCC Site Reg. #349717

IC Site Reg. #2044A-2

Non-accredited tests contained in this report:

N/A

EUT Description

Model:	PX150
Serial:	ae971f489b0
Firmware:	N/A
Software:	1.1.26
Description:	Trajectory Tracking Traffic Radar Sensor and Data Collector
Additional Information:	Field Disturbance Radar designed for license free portable or permanent traffic data measurement and collection. Freq Range = 61 – 61.5 GHz Modulation = FMCW
Receipt of Sample(s):	3/24/2025
EUT Condition:	**Visual Damage** No **State of Development** Production/Production Equivalent

Test Setup and Modes of Operation
For alignment and maximizing signal levels at mm-wave frequencies, the EUT was placed in CW mode of operation.
For final data, the EUT was placed in FMCW mode of operation.

EUT Operation during Tests
The EUT operational state was monitored with a ping using a Tera Term terminal throughout the test.
The EUT is DC powered.
For all RF tests the DC power was set to 12 VDC with a lab power supply.

MPE Evaluation

The EUT is a mobile device used in an Uncontrolled Exposure environment.
Per KDB 447498 D04 Interim General RF Exposure Guidance v01, all devices operating at > 6 GHz are to be evaluated per the MPE limits in § 1.1310(e)(1) - Table 1

Limits Uncontrolled Exposure 47 CFR 1.1310 Table 1, (ii)		
	0.3-1.234 MHz:	Limit [mW/cm²] = 100
	1.34-30 MHz:	Limit [mW/cm²] = (180/f²)
	30-300 MHz:	Limit [mW/cm²] = 0.2
	300-1500 MHz:	Limit [mW/cm²] = f/1500
	1500-100,000 MHz	Limit [mW/cm²] = 1.0

Test Data

The radiated output power used in the MPE calculation is from the FCC Part 15.255 test report (p2450014_FCC_Part 15.255_RSS 210_rev 1.0) associated with EUT.
The antenna gain is part of the final radiated power measurement.
0 dBi antenna gain was used for the MPE calculation.

MPE calculation

Test Frequency, MHz	61105
Power, Conducted, mW (P)	193.64
Antenna Gain Isotropic	0
Antenna Gain Numeric (G)	1
Antenna Type	lense
Distance (R)	20 cm

$S = \frac{P * G}{4\pi r^2}$
Power Density (S) mw/cm^2

Power Density (S) =0.039 mW/cm^2
Limit = (from above table) = 1.0 mW/cm^2

The EUT Power Density of 0.039 mW/cm^2 is under the limit of 1.0 mW/cm^2 at 20 cm.

END OF TEST REPORT