



H.B. Compliance Solutions

RF Exposure MPE Report

For the

Pawport

Smart Pet Door System

January 15, 2026

Prepared for:

Smartec Products, LLC DBA Pawport

2340 W Parkside Lave, H-112

Phoenix, AZ 85027

Prepared By:

H.B. Compliance Solutions

5005 S. Ash Avenue, Suite # A-10

Tempe, Arizona 85282

Reviewed By:

A handwritten signature in black ink, appearing to read 'Hoosamuddin Bandukwala'.

Hoosamuddin Bandukwala



Cert # ATL-0062-E

1. Equipment Overview

Product Name:	Smart Pet Door System
Model(s) Tested:	101-0001, 104-0001, 106-0001
FCC ID:	2BSOT-SPD101
Supply Voltage Input:	Primary Power: +120 ac
Frequency Range:	5925-7250 MHz
No. of Channels:	1
Type(s) of Modulation:	OOK
Range of Operation Power:	-27.23dBm (EIRP)
Emission Designator:	N/A
Channel Spacing(s)	N/A
Test Item:	Pre-Production
Type of Equipment:	Mobile
Antenna Requirement (§15.203) :	Type of Antenna: Ceramic Antenna Gain of Antenna: -0.5dBi
Environmental Test Conditions:	Temperature: 15-35°C Humidity: 30-60% Barometric Pressure: 860-1060 mbar
Modification to the EUT:	None

2. Applicable Standard

According to §1.1307 the criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter. Test Limits

Evaluated against exposure limits: General Use X or Controlled Use

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

f = frequency in MHz* = Plane-wave equivalent power density

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules.

The emissions should be within the limits at 300kHz in the above table. (Use 300kHz limits for 150kHz)

3. Test Results

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where,

S = power density (mW/cm²)

P = output power at the antenna terminal (mW)

G = gain of transmit antenna (numeric)

R = distance from transmitting antenna (cm)

For UWB Transmitter

Maximum peak output power = -27.23 (dBm)

Maximum peak output power at antenna input terminal = 0.00189 (mW)

Antenna gain (typical) = -0.5 (dBi)

Maximum antenna gain = 1.0 (numeric)

Prediction distance = 20 (cm)

Prediction frequency = 6925 (MHz)

MPE limit for uncontrolled exposure at prediction frequency = 1.0 (mW/cm²)

Power density at prediction frequency = 0.0000003760 (mW/cm²)

To solve for the minimum mounting distance required;

$$R = \sqrt{PG/4\pi S}$$

$$R = \sqrt{0.00189 \times 1.0 / 4\pi \times 0.0000003760} = \underline{20 \text{ cm}} \text{ (Based on continuous transmission)}$$

Therefore, at 20cm the spectral power density is less than **the 1.0 mW/cm²** limit for uncontrolled exposure.

Simultaneous Transmission Evaluation

Limit

The sum of the ratios of the peak or spatially averaged results to the applicable frequency dependent MPE limits must be <1 at all locations where users and bystanders can be exposed.

Calculation

Mode	UWB Power Density/Limit	Bluetooth Power Density/Limit	WiFi Power Density /Limit	Σ (Power Density/Limit) of WiFi+UWB Transmitter	Σ (Power Density/Limit) of Bluetooth+UWB Transmitter
WiFi			0.0132		0.0132
Bluetooth		0.0004			0.0004
UWB	0.0000003				

The UWB, WiFi and Bluetooth transmitter, the aggregated (power density/limit) is smaller than 1, and the MPE of 3 collocated transmitters is compliant.

Note: FCC ID for the pre-certified Wifi/Bluetooth module is:

2AC7Z-ESP32WROOM32E

BT antenna and Wi-Fi 2.4G Antenna can't transmit simultaneously.

END OF TEST REPORT