



Excellence in Compliance Testing

Certification Exhibit

FCC ID: 2AJPY-MDLTN00

FCC Rule Part: 47 CFR Part 2.1091

ACS Project Number: 16-3078

Manufacturer: Smart Pet Technologies, LLC
Model: SPT001M

RF Exposure

General Information:

Applicant: Smart Pet Technologies, LLC
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information for BLE Radio:

Antenna Type: Copper Wire Monopole
 Antenna Gain: -10.4 dBi
 Maximum Transmitter Conducted Power: 2.26 dBm, 1.68 mW
 Maximum System EIRP: -8.14 dBm, 0.15 mW
 Exposure Conditions: 20 centimeters or greater

Technical Information for Cellular Radio:

Antenna Type: Monopole Flex Antenna
 Antenna Gain: 1 dBi for High Band and 0 dBi for Low Band
 Maximum Transmitter Conducted Power: 22.93 dBm, 196.34 mW for High Band and 22.72 dBm, 187.07 mW for Low Band
 Maximum System EIRP: 23.93 dBm, 247.17 mW for High Band and 22.72 dBm, 187.07 mW for Low Band
 Exposure Conditions: 20 centimeters or greater

Note: The BLE and Cellular Radio are not capable of simultaneous transmission.

MPE Calculation

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 1: MPE Calculation for BLE Radio

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)
2402	22.26	1.00	1.68	-10.4	0.091	20	0.000

Table 2: MPE Calculation for Cellular Radio

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)
1852.4	22.93	1.00	196.34	1	1.259	20	0.049
836.4	22.72	0.56	187.07	0	1.000	20	0.037