Client:	Apptricity Corporation	PR Number:	PR124075
Model:	BT Tag 550-130-100	T-Log Number:	TL124075-RA BLE
		Project Manager:	Christine Krebill
Contact:	Marci Haslam	Project Engineer:	David Bare
Standard:	FCC Part 15.247, RSS-247	Class:	N/A

Maximum Permissible Exposure / SAR Exclusion

Specific Details

Objective: Evaluate the RF Exposure requirements per FCC 1.1310, 2.1091, 2.1093 and RSS-102.

Date of Test: 2/9/2021
Test Engineer: David Bare

General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4 \pi d^2)$$

Where: S is power density (W/m^2), P is output power (W), G is antenna gain relative to isotropic, d is separation distance from the transmitting antenna (m).

SAR exclusion calculation formula is from FCC KDB 447498 D01 section 4.3:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(GHz)}}]$$

Where: $f_{(GHz)}$ is the RF trasnmit channel frequency

Summary of Results

Device complies with SAR exclusion at 5mm separation:	Yes

Deviations From The Standard

No deviations were made from the requirements of the standard.

FCC SAR Exclusion Calculation

Freq. MHz	EUT Power dBm	EUT Power mW*	Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Separation Distance (mm)	SAR Exclusion Calc.	SAR Exclusion Limit
2480	2.0	1.58	0	3.5	2.0	3.55	5.0	0.50	3.0

Power for calculation reduced by 20 dB due to as in any 1 second period the maximum exposure duty cycle would be .36% (3.63ms/second).