



## EMC Test Data

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

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

Where:  $f_{\text{(GHz)}}$  is the RF transmit channel frequency

#### Summary of Results

Device complies with SAR exclusion at 5mm separation:	Yes
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#### Deviations From The Standard

No deviations were made from the requirements of the standard.

#### FCC SAR Exclusion Calculation

Freq. MHz	EUT Power		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).