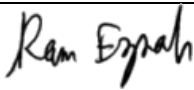
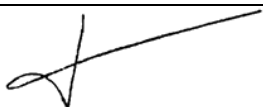




## SAR Exclusion Report

Applicant	Colibri Spindles Ltd.
Applicant Address	Building One Lavon Industrial Park Israel 2011800
Product	BLE RPM Meter
FCC ID	2ACJNTJEH-030A
Standard(s)	47CFR15 Section 15.247
Test Report No.	Ra263850.01
Ref. No.	RF263850.03

Prepared by:	Ram Ezrah	
Reviewed by:	Netanel Yakobov	
Date:	19 December 2023	



## 1 EUT Information

Model No.	TJEH-030A
Antenna type	Chip
Antenna gain	0.5 dBi (max.)
Assigned frequency range	2400-2483.5 MHz
Operating frequency range	2402.0-2480.0 MHz
Transmit power (conducted)	-2.0 dBm
Modulation bandwidth	1077.0 kHz
Bit rate	1 Mbit/s
Distance from the human body (min.)	5 cm

## 2 Evaluation Method and Limits

KDB447498 D01 V06, Section 4.3.1: "Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied."

a) For 100 MHz to 6 GHz and test separation distances  $\leq 50$  mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR, and  $\leq 7.5$  for 10-g extremity SAR, where:

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz.
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

"When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion".



## Appendix A

### *SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm*

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	
MHz	30	35	40	45	50	mm
150	232	271	310	349	387	SAR Test Exclusion Threshold (mW)
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

## 2.1 Calculation

1. Max. power (conducted): -2.0 dBm = 0.63 mW
2. Min. test separation distance: 5 cm = 50 mm
3.  $0.63 / 50 * \sqrt{2.4} = 0.02$



### 3 Test Results

Frequency (MHz)	Calculated SAR (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	SAR Test
2402.0	0.02	3.0	No

### 4 Conclusion

The measurement results comply with the limits per the abovementioned FCC requirements.

**End of Report**