

F2 Labs 16740 Peters Road Middlefield, Ohio 44062 United States of America www.f2labs.com

# SAR EXCLUSION REPORT

Manufacturer:	Namatad, Inc. 1705 Dock Street, Unit 106 Tacoma, Washington  98402  USA		
Applicant:	Same as Above		
Product Name:	FIREFLY Device		
Product Description:	Network-accessible location-tracking device		
Model:	N1		
FCC ID:	2A4GV-FIREFLYN1		
	Contains FCC ID: 2AC7Z-ESP32WROOM32E		

### Standard(s):

• KDB447498 Appendix A

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**Report Constructed by:** 

Julius Chiller, EMC/Wireless Engineer

**Report Reviewed by:** 

Ken Littell, Vice President of EMC

F2 Labs 26501 Ridge Road Damascus, MD 20872 Ph 301.253.4500 F2 Labs 16740 Peters Road Middlefield, OH 44062 Ph 440.632.5541 F2 Labs 8583 Zionsville Road Indianapolis, IN 46268 Ph 317.610.0611

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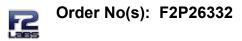
### 1 ADMINISTRATIVE INFORMATION

### **1.1 Measurement Location:**

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

# 1.2 Document History

Document Number	cument Number Description		Approved By	
F2P26332-03E First Issue		2022-07-14	K. Littell	



# 2 SUMMARY OF RESULTS

	Standard(s)	Results
SAR Exclusion	KDB447498, Appendix A	Complies

Modifications Made to the Equipment
None



### **3 ENGINEERING STATEMENT**

This report has been prepared on behalf of Namatad, Inc to provide documentation for the SAR Exclusion herein. This equipment has been tested and found to comply with the SAR Exclusion levels listed in Appendix A of KDB447498. The minimum distance from the BT module antenna used inside of the N1, is 8mm. The output power of the BT classic is the highest at 10mW, which is well below the exclusion limit of 15.2mW at 8mm. The max EIRP is 13.4mW, which is still below the 15.2mW threshold.

#### Appendix A

#### SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and $\leq 50~mm$

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in section 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	



### 4 EUT INFORMATION AND DATA

### 4.1 Equipment Under Test: Product: FIREFLY Device Model: N1 Serial No.: None Specified FCC ID: 2A4GV-FIREFLYN1 Contains FCC ID: 2AC7Z-ESP32WROOM32E

### 4.2 Trade Name: Namatad, Inc.

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# 4.3 **Power Supply:**

Wireless Charger Trade Name: Chotech Model: T511-S

4.4 Applicable Rules: KDB447498

### **4.5 Equipment Category:** A network-accessible location-tracking device

### 4.6 Antenna: Integral Antenna

4.7 Accessories: N/A