

RF EXPOSURE EVALUATION REPORT

FCC ID	: 2ABOF-G1RN6AHB012
Equipment	: Remote Node (RN)
Brand Name	: TARANA
Model Name	: G1RN6AHB012
Marketing Name	: TARANA G1
Applicant	: Tarana Wireless 590 Alder Drive, Milpitas, CA 95035
Manufacturer	: Tarana Wireless, Inc.
Standard	590 Alder Drive, Milpitas, CA 95035 : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full

Gua Guarge

Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date	
FA230713001	Rev. 01	Initial issue of report	Aug. 15, 2023	



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1. Description of Equipment Under Test (EUT)

Product Feature & Specification				
EUT Type	Remote Node (RN)			
Brand Name	TARANA			
Model Name	G1RN6AHB012			
Marketing Name	TARANA G1			
	2ABOF-G1RN6AHB012			
Wireless Technology and Frequency Range	UNII-3 Band: 5725 MHz ~ 5850 MHz			
Mode	40MHz 40+40MHz			

Reviewed by: <u>Jason Wang</u> Report Producer: <u>Daisy Peng</u>

2. Maximum RF average output power among production units

Mode	Maximum Burst Average power(dBm)			
UNII-3 Band	30			



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3. <u>RF Exposure Limit Introduction</u>

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)	
	(A) Limits for O	ccupational/Controlled Expos	sures		
0.3-3.0	614 1.63 *(100		6		
3.0-30 1842/		/f 4.89/f *(900/f2)		6	
30-300	61.4	0.163	1.0	6	
300-1500			f/300	6	
1500-100,000			5	6	
	(B) Limits for Gene	ral Population/Uncontrolled	Exposure		
0.3-1.34	614	1.63	*(100)	30	
1.34-30 824		f 2.19/1	*(<mark>180/f</mark> 2)	30	
30-300	27.5	0.073	0.2	30	
300-1500			f/1500	30	
1500-100,000			1.0	30	

The MPE was calculated at <u>40 cm</u> to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

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

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Burst Average Power (dBm)	⁽¹⁾ Maximum Source based Time Average Power (dBm)	Maximum Source based Time Average EIRP (dBm)	Maximum Source based Time Average EIRP (mW)	Power Density at 40cm (mW/cm^2)	Limit (mW/cm^2)
UNII-3 Band	5725	17.11	30.0	26.2	43.3	21428.91	0.967	1.000

General Note:

1. According to operation descriptional the maximum transmission duty cycle is 41.83%.

2. As required by Part2.1091(c), time-average effective radiated power applies to power density calculation.

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.