RF EXPOSURE EVALUATION REPORT

FCC ID	:	**2ABOF-G1-BN3ASI001**
Equipment	:	**Base Node (BN)**
Brand Name	:	**Tarana**
Model Name	:	**G1-BN3ASI001**
Marketing Name	:	**G1**
Applicant	:	**Tarana Wireless 590 Alder Drive, Milpitas, CA 95035**
Manufacturer	:	**Tarana Wireless 590 Alder Drive, Milpitas, CA 95035**
Standard	:	**47 CFR Part 1.1307**

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part 1.1307 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full

Cona Huang

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA210405002	Rev. 01	Initial issue of report	Jul. 09, 2021
FA210405002	Rev. 02	Update output power	Sep. 03, 2021
FA210405002	Rev. 03	Update output power	Sep. 14, 2021

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Base Node (BN)
Brand Name	Tarana
Model Name	G1-BN3ASI001
FCC ID	2ABOF-G1-BN3ASI001
Wireless Technology and Frequency Range	3555MHz ~ 3695MHz
SW Version	SYS.A3.B10.XXX.0.950.22.00
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Reviewed by: Jason Wang

Report Producer: Daisy Peng

2. Maximum EIRP Output Power

Mode	Maximum EIRP power(dBm)
Single Carrier	49.04
Multi Carrier	50.54

Remark:

The maximum EIRP was according to tune-up and part96 report.

3. RF Exposure Limit Introduction

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 Occupational/Controlled Exposures				
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 General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f2)	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 96 cm 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	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 96cm (mW/cm^2)	Limit (mW/cm^2)
Single Carrier	49.04	80.17	80167.81	0.863	1.000
Multi Carrier	50.54	113.24	113240.04	0.978	1.000

Conclusion:

According to 47 CFR §1.1307, the RF exposure analysis concludes that the RF Exposure is FCC compliant.