



RF EXPOSURE EVALUATION REPORT

FCC ID : 2ABOF-G1-RN3ASI001
Equipment : Residential Node (RN)
Brand Name : Tarana
Model Name : G1-RN3ASI001
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

Approved by: Cona Huang / Deputy Manager



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1. Description of Equipment Under Test (EUT)

| Product Feature & Specification | |
|---|----------------------------|
| EUT Type | Residential Node (RN) |
| Brand Name | Tarana |
| Model Name | G1-RN3ASI001 |
| FCC ID | 2ABOF-G1-RN3ASI001 |
| Wireless Technology and Frequency Range | 3555MHz ~ 3695MHz |
| SW Version | SYS.A3.B10.XXX.0.951.10.02 |
| EUT Stage | Identical Prototype |

Reviewed by: Jason Wang

Report Producer: Daisy Peng

2. Maximum EIRP output power

| Mode | Maximum EIRP power(dBm) |
|----------------|-------------------------|
| Single Carrier | 46.94 |
| Multi Carrier | 46.60 |

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/f ²) | 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/f 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 63 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) | Maximum EIRP (mW) | Power Density at 63cm (mW/cm ²) | Limit (mW/cm ²) |
|----------------|--------------------|------------------|-------------------|---|-----------------------------|
| Single Carrier | 46.94 | 49.43 | 49431.07 | 0.992 | 1.000 |
| Multi Carrier | 46.60 | 45.71 | 45708.82 | 0.917 | 1.000 |

Conclusion:

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