

Company: Tarana Wireless

MPE Evaluation of: AA2-CN65AFP

To: FCC CFR 47 Chapter 1 Subpart §1.1310

Report No.: TARA25-MPE

MPE/RF EXPOSURE TEST REPORT



MPE/RF EXPOSURE TEST REPORT

FROM



MPE Evaluation of: Tarana Wireless AA2-CN65AFP
to

To: FCC CFR 47 Chapter 1 Subpart §1.1310

Test Report Serial No.: TARA25 - Absolute Air 2 FCC IC 5GHz

This report supersedes: NONE

Applicant: Tarana Wireless
2953 Bunker Hill Lane
Santa Clara, California 95054
USA

Product Function: Tarana Wireless fixed Multi-link
backhaul radio product

Issue Date: 6th December 2016

This Test Report is Issued Under the Authority of:

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1. MAXIMUM PERMISSABLE EXPOSURE

Calculations for Maximum Permissible Exposure Levels

$$\text{Power Density} = P_d \text{ (mW/cm}^2\text{)} = \text{EIRP}/(4*\pi*d^2)$$

$$\text{EIRP} = P * G$$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

$$\text{Numeric Gain} = 10 \wedge (\text{G (dBi)}/10)$$

Because the EUT belongs to the Occupational/Controlled Exposure the limit of power density is 5.0 mW/cm²

These calculations represent worst case in terms of the exposure levels.

| Freq. Band (MHz) | Ant Gain (dBi) | Numeric Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Calculated Safe Distance @ 5mW/cm ² | Calculated Power Density @ 20cm (mW/cm ²) | Minimum Separation Distance (cm) |
|------------------|----------------|------------------------|-------------------------|------------------------|--|---|----------------------------------|
| 5150.0 - 5250.0 | 14.00 | 25.12 | 29.98 | 995.41 | 19.95 | 4.97 | 20.00 |
| 5725.0 - 5850.0 | 14.00 | 25.12 | 29.96 | 990.43 | 19.95 | 4.95 | 20.00 |

Assessment for simultaneous operation:

| Freq. Band (MHz) | Ant Gain (dBi) | Numeric Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Calculated Safe Distance @ 5mW/cm ² | Calculated Power Density @ 20cm (mW/cm ²) | Minimum Separation Distance (cm) |
|---------------------------------------|----------------|------------------------|-------------------------|------------------------|--|---|----------------------------------|
| 5150.0 - 5250.0 | 14.00 | 25.12 | 29.98 | 995.41 | 19.95 | 4.97 | 20.00 |
| 5725.0 - 5850.0 | 14.00 | 25.12 | 29.96 | 990.43 | 19.95 | 4.95 | 20.00 |
| - | | | | | | | |
| EIRP TOTAL (mW/EIRP) : 49892.0 | | | | | 28.2 | 9.92 | 29.0 |

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Specification
Maximum Permissible Exposure Limits

FCC §1.1310 Limit = $5\text{mW} / \text{cm}^2$ from 1.310 Table 1
Because the EUT belongs to the Occupational/Controlled Exposure the limit of power density is $5.0\text{ mW}/\text{cm}^2$

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