

RF EXPOSURE EVALUATION REPORT

FCC ID : 2AMM6-ERD-R2412NAC0
Equipment : 24G Radar Module
Brand Name : EARDATEK
Model Name : ERD-R2412NAC0-001
Applicant : Earda Technologies Co.,Ltd
Block A,LianFeng Creative Industry
Park,2 JiSheng Road., HuangGe
Town,NanSha District,Guangzhou,PRC.
Standard : 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: 3786) and the FCC designation No. TW3786 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



Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA5O2702	Rev. 01	Initial issue of report	Dec. 10, 2025

**1. Description of Equipment Under Test (EUT)**

Product Feature & Specification	
Equipment Name	24G Radar Module
Brand Name	EARDATEK
Model Name	ERD-R2412NAC0-001
FCC ID	2AMM6-ERD-R2412NAC0
Wireless Technology and Frequency Range	24GHz Radar: 24GHz ~ 24.25GHz
Mode	FMCW

Reviewed by: Jason Wang**Report Producer: Carlie Tsai****2. Maximum RF average output power among production units**

Band / Mode	Maximum EIRP Power (dBm)
	FMCW
24GHz Radar	-2.14

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 20 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

Band	Frequency (MHz)	Maximum EIRP (dBm)	Maximum PG (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)
24GHz Radar	24000	-2.14	0.61	0.0001	1.000

Conclusion:

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