

RF EXPOSURE EVALUATION REPORT

FCC ID : CKENTG1014
Equipment : 5G Radio Unit
Brand Name : Japan Radio Co., Ltd.
Model Name : NTG-1014
Applicant : Japan Radio Co., Ltd.
1-12, Fukuoka 2-chome, Fujimino-shi Saitama 356-8580
Manufacturer : Japan Radio Co., Ltd.
1-12, Fukuoka 2-chome, Fujimino-shi Saitama 356-8580
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. 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	5G Radio Unit
Brand Name	Japan Radio Co., Ltd.
Model Name	NTG-1014
FCC ID	CKENTG1014
Wireless Technology and Frequency Range	5G NR n48/n77/n78 : 3550 MHz ~ 3700 MHz
Mode	5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM
HW Version	V2.4.4.5.4.0.0
EUT Stage	Identical Prototype

Reviewed by: Jason Wang

Report Producer: Carlie Tsai

2. Maximum RF average output power among production units

Radio Tech	Band Number	Maximum Transmit Power Level (dBm)
		total
FR1	n48/n77/n78	38



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 179 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	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 179cm (mW/cm ²)	Limit (mW/cm ²)
5G FR1 n48/n77/n78	18.00	38.00	56.0	398.11	398107.17	0.989	1.000

Conclusion:

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