

RF EXPOSURE EVALUATION REPORT

FCC ID : S9GT670SN
Equipment : T670sn Access Point
Brand Name : RUCKUS
Model Name : T670sn
Applicant : Ruckus Wireless LLC
350 W. Java Dr., Sunnyvale CA 94089 USA
Manufacturer : Ruckus Wireless LLC
350 W. Java Dr., Sunnyvale CA 94089 USA
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



SPORTON INTERNATIONAL INC. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan



Table of Contents

1. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	4
2. MAXIMUM RF AVERAGE OUTPUT POWER AMONG PRODUCTION UNITS	4
3. RF EXPOSURE LIMIT INTRODUCTION	5
4. RADIO FREQUENCY RADIATION EXPOSURE EVALUATION	6
4.1. Standalone Power Density Calculation	6
4.2. Collocated Power Density Calculation.....	6



History of this test report

Report No.	Version	Description	Issued Date
FA240528002	Rev. 01	Initial issue of report	Mar. 18, 2025

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

Product Feature & Specification	
EUT Type	T670sn Access Point
Brand Name	RUCKUS
Model Name	T670sn
FCC ID	S9GT670SN
Wireless Technology and Frequency Range	WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 6GHz Band: 5925 MHz ~ 6425 MHz, 6525 MHz ~ 6875 MHz
Mode	WLAN: 802.11a/b/g/n/ac/ax/be HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160/EHT20/EHT40/EHT80/EHT160/EHT320
EUT Stage	Identical Prototype

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

Average power (dBm)		
2Tx	WLAN 2.4GHz	26.16
	WLAN 5.2GHz	24.62
	WLAN 5.3GHz	18.38
	WLAN 5.5GHz	17.08
	WLAN 5.8GHz	24.07
	WLAN 6GHz	23.02
4Tx	WLAN 5.2GHz	24.35
	WLAN 5.3GHz	18.30
	WLAN 5.5GHz	17.08
	WLAN 5.8GHz	24.06

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 29 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 PG (mW)	Power Density at 29cm (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit
2Tx	2.4GHz WLAN	8.55	26.16	34.71	2958.01	0.280	1.000	0.280
	5.2GHz WLAN	11.30	24.62	35.92	3908.41	0.370	1.000	0.370
	5.3GHz WLAN	11.57	18.38	29.95	988.55	0.094	1.000	0.094
	5.5GHz WLAN	12.82	17.08	29.90	977.24	0.093	1.000	0.093
	5.8GHz WLAN	11.91	24.07	35.98	3962.78	0.375	1.000	0.375
	6GHz WLAN	10.82	23.02	33.84	2421.03	0.229	1.000	0.229
4Tx	5.2GHz WLAN	11.30	24.35	35.65	3672.82	0.348	1.000	0.348
	5.3GHz WLAN	11.57	18.30	29.87	970.51	0.092	1.000	0.092
	5.5GHz WLAN	12.82	17.08	29.90	977.24	0.093	1.000	0.093
	5.8GHz WLAN	11.91	24.06	35.97	3953.67	0.374	1.000	0.374

4.2. Collocated Power Density Calculation

WLAN 2.4GHz Power Density / Limit	WLAN 5/6GHz Power Density / Limit	Σ (Power Density / Limit) of WLAN 2.4GHz + WLAN 5/6GHz
0.280	0.375	0.655

Note:

1. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WLAN 2.4GHz + WLAN 5/6GHz.
2. Considering the WLAN 2.4GHz collocation with the WLAN 5/6GHz transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant.

Conclusion:

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