RF EXPOSURE EVALUATION REPORT

FCC ID	:	**GKRRXMG1**
Equipment	:	**5G M.2 Module**
Brand Name	:	**Compal**
Model Name	:	**RXM-G1**
Applicant	:	**Compal Electronics, Inc. No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei, (114) Taiwan**
Manufacturer	:	**Compal Electronics, Inc. No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei, (114) Taiwan**
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: 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.

Cona Huang

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA040727-03	Rev. 01	Initial issue of report	Aug. 16, 2022

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	5G M.2 Module
Brand Name	Compal
Model Name	RXM-G1
FCC ID	GKRRXMG1
Wireless Technology and Frequency Range	5G NR n48 : 3550 MHz ~ 3700 MHz
Mode	5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM

Reviewed by: Jason Wang

Report Producer: Paula Chen

2. Maximum RF average output power among production units

Mode		Maximum Average power(dBm)
5G NR	n48	25

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/f2)	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/f2)	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. RF Exposure Evaluation

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Maximum Output Power Limit (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm^2)	Limit (mW/cm^2)
5G NR n48	3550	-2.00	25.00	23.000	0.200	0.200	199.526	0.040	1.000

Conclusion:

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