

RF Exposure Report

FCC ID : GKRG943M
Equipment : Wireless Device
Model Name : G943M
Applicant : Compal Electronics, Inc.
No. 581-1 & 581, Ruiguang Rd., Nei-hu District,
Taipei City 114, TAIWAN (R.O.C.)
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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA130402	Rev. 01	Initial issue of report	Sep. 02, 2021
FA130402	Rev. 02	Update section 3	Oct. 26, 2021
FA130402	Rev. 03	Update section 1 and 5	Nov. 03, 2021

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Wireless Device
Model Name	G943M
FCC ID	GKRG943M
Frequency Range	165 KHz ~ 205 KHz
Mode	ASK
Date of Test	Aug. 30, 2021

2. RF Exposure Limit Introduction

§ 1.1310 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 § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

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 Exposure				
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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

(1) Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when a person is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure. The phrase fully aware in the context of applying these exposure limits means that an exposed person has received written and/or verbal information fully explaining the potential for RF exposure resulting from his or her employment. With the exception of transient persons, this phrase also means that an exposed person has received appropriate training regarding work practices relating to controlling or mitigating his or her exposure. Such training is not required for transient persons, but they must receive written and/or verbal information and notification (for example, using signs) concerning their exposure potential and appropriate means available to mitigate their exposure. The phrase exercise control means that an exposed person is allowed to and knows how to reduce or avoid exposure by administrative or engineering controls and work practices, such as use of personal protective equipment or time averaging of exposure.

(2) General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

3. Test Mode

This device has been tested in the following charging conditions as below:

Test Mode	Test Setup Configuration	Charging Current Condition
TM1	Test w/ Client Device installed	< 20% Battery status

The EUT (WPTC transmitter) is charged with client device with zero separation, and we had check the client device battery three level <20% / 50% / >90% that worst case is set to less than 20% configuration was perform.

4. Measurement Equipment

Instrument	Manufacturer	Model No.	Serial No.	Freq Rang	Last Cal.	Due Date
Electric and Magnetic field Probe-Analyzer	Narda S.T.S / PMM	EHP 200AC	170WX80309	3KHz~30MHz	Sep. 12, 2020	Sep. 11, 2021

5. RF Exposure Evaluation

1. The device power transfer frequency is less than 1MHz and the output power from each primary coil is less than or equal to 15 watts and the system just one source primary coil and the client device is placed directly in contact with the transmitter and the device is meet mobile exposure condution also the test result is meet 10% of the applicable MPE limit.
2. The equipment under test was placed on a wooden desk inside of shield room. The isotropic field probe was used to measure the field strength for 6 EUT surfaces, the detail setup photo please refer to Appendix A.
3. Per KDB 680106 D01v03r01, RF exposure evaluation at 10 cm for all positions. Emissions between 50 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 1.63 A/m and aggregate H-field strengths from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Position (Distance 10cm)	H-Field Measurement (A/m)						
	A	B	C	D	E	F	limit
TM1	0.0600	0.0872	0.0153	0.0167	0.0155	0.0354	0.815

Conclusion:

The field strength limit refers to Part 1.1310 and the test result of exposure evaluation is compliant with 50% of the MPE limit.