

RF Exposure Report

Report No.: MFBHPZ-WTW-P24070283

FCC ID: 2AAFM-20GBO9901

Test Model: 20GBO9901

Received Date: 2024/7/10

Test Date: 2024/8/1 ~ 2024/8/14

Issued Date: 2024/9/4

Applicant: Corsair Memory, Inc.

Address: 115 North McCarthy Blvd, Milpitas, CA 95035, USA

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

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**FCC Registration /
Designation Number:** 198487 / TW2021



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Release Control Record

Issue No.	Description	Date Issued
MFBHPZ-WTW-P24070283	Original release.	2024/9/4

1 Certificate of Conformity

Product: Stream Deck Studio

Brand:

elgato or



or



Test Model: 20GBO9901

Sample Status: Engineering sample

Applicant: Corsair Memory, Inc.

Test Date: 2024/8/1 ~ 2024/8/14

Standards: FCC Part 2 (Section 2.1091)

References Test Guidance: KDB 447498 D01 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by :

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Date: 2024/9/4

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Approved by :

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Date: 2024/9/4

Jeremy Lin / Project Engineer

2 RF Exposure

2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
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

f = Frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

The antenna information is listed as below.

Antenna Type	Connector Type
PIFA	IPEX

*Due to radiated measurements are made and the antenna gain is already accounted for this device, so provide an antenna datasheet and/or antenna measurement report is not required. The antenna dimensions and pictures (include antenna wire length if have) are stated in EUT photo exhibit.

2.5 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
13.56	-37.83	20	0.0000000327891	0.978

NOTE:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Calculate the EIRP of NFC from the radiated field strength:

$$\text{EIRP (dBm)} = \text{Radiated field strength (dBuV/m)} + 20 \times \text{Log(d)} - 104.77$$

d is the measurement distance, in 3 m.
Radiated Field strength conversion 30m to 3m : $17.4\text{dBuV/m} + 40\log(30/3) = 57.4\text{dBuV/m}$
 $\text{EIRP} = 57.4 + 20 \times \text{Log}(3) - 104.77 = -37.83 \text{ dBm}$
Maximum output power used for calculation is the max tune-up including tolerance.

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