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
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	198487 / TW2021

Testing Laboratory
2021

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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 : Annie Chang , **Date:** 2024/9/4

Annie Chang / Senior Specialist

Approved by : Jeremy Lin , **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

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

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

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