

RF Exposure Report

Report No.: MFBWHO-WTW-P24040364

FCC ID: 2AY6FSTKT60

Test Model: T60

Received Date: 2024/2/28

Test Date: 2024/2/28 ~ 2024/5/17

Issued Date: 2024/6/14

Applicant: STREAMTECK SCIENTIFIC INC.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration /
Designation Number: 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
MFBWHO-WTW-P24040364	Original Release	2024/6/14

1 Certificate of Conformity

Product: SmartCaring
Brand: STREAMTECK
Test Model: T60
Sample Status: Engineering Sample
Applicant: STREAMTECK SCIENTIFIC INC.
Test Date: 2024/2/28 ~ 2024/5/17
FCC Rule Part: FCC Part 2 (Section 2.1091)
Standards: 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.

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Approved by :  , **Date:** 2024/6/14
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

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

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 20 cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

Antenna No.	Frequency range	Gain (dBi)	Antenna Type	Connector Type
Radio 1 (WIFI 2.4G)	2.4~2.4835GHz	0.19	PCB	N/A
Radio 1 (WIFI 5G)	5.15~5.85GHz	3.27	PCB	N/A
Radio 1 (BT)	2.4~2.4835GHz	3	PIFA	ipex(MHF)
Radio 2 (60G Radar)	60~64GHz	15.8	PCB	N/A

*Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2.5 Calculation Result

1. The EUT contains certified WLAN/Bluetooth modular which FCC ID: COF-AS01.
2. For WLAN (2.4GHz), WLAN (5GHz) and Bluetooth the Maximum power was refer to FCC ID: COF-AS01.

Operation Mode	Frequency Band (MHz)	Max. AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
WLAN (2.4GHz)	2412-2462	16.42	0.19	20	0.009	1	Pass
WLAN (5GHz)	5180-5825	13.44	3.27	20	0.009	1	Pass
Bluetooth	2402-2480	3.80	3	20	0.001	1	Pass

Operation Mode	Frequency Band (GHz)	Max. EIRP (dBm)	Max. EIRP (mW)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
mmWave (60GHz)	60-64	13.90	24.547	20	0.005	1	Pass

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

Conclusion:

The formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

The simultaneous operation mode was determined by client.

$$WLAN (2.4GHz) + WLAN (5GHz) + Bluetooth + mmWave (60GHz) = 0.009 / 1 + 0.009 / 1 + 0.001 / 1 + 0.005 / 1 + = 0.024$$

Therefore, the maximum calculations of above situations are less than the "1" limit.

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