MPE TEST REPORT

Applicant	:	Keeson Technology Corporation Limited
Address of Applicant	:	No. 195, Yuanfeng East Road,Wangjiangjing, Xiuzhou District,Jiaxing City,314000,China
Product Name	:	FAN CONTROL BOX
Brand Name	:	N/A
Model No.	:	CB05BF,CB05SF
Sample acquisition Method	:	Sent by client
Sample No.	:	E23010029-01#01 E23010029-01#02
FCC ID	:	2AK23-CB05
Standard	:	FCC Part 2.1091
Date of Receipt	:	2023-01-13
Date of Test	:	2023-01-13 ~ 2023-01-30
Date of Issue	:	2023-01-30

Remark:

This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

Prepared by: Erik. Yang (Erik Yang) Reviewed by: Jennifer zhou (Jennifer Zhou) Approved by: Guoyou Chi (Authorized signatory: Guoyou Chi)

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1 General Information

1.1 Testing Laboratory

ISED CAB identifier #	CN0081
Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298, Pingan Road, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Environmental conditions

Temperature (°C)	18-25
Humidity (%RH)	40-65
Barometric Pressure (mbar)	960-1060
Ambient noise & Reflection（W/kg）	< 0.012

1.3 Details of Application

Applicant Company Name	Keeson Technology Corporation Limited
Address	No. 195, Yuanfeng East Road,Wangjiangjing, Xiuzhou District,Jiaxing City,314000,China
Contact Person	Sam xu
Telephone	18279170755
Email	xuwb@keeson.com
Manufacturer Company Name	DewertOkin Technology Group Co., Ltd.
Address	No.465, Xinnanyang Road, Wangjiangjing Development Zone, Xiuzhou District, Jiaxing City, Zhejiang Province, China.
Factory Company Name	DewertOkin Technology Group Co., Ltd.
Address	No.465, Xinnanyang Road, Wangjiangjing Development Zone, Xiuzhou District, Jiaxing City, Zhejiang Province, China.

1.4 Details of EUT

Product Name	FAN CONTROL BOX
Brand Name	N/A
Test Model No.	CB05BF
Series Model No.	CB05SF
Difference Description	CB05BF and CB05SF all the same except for the model name and terminal; CB05SF had two less terminals than CB05BF, Refer to the sample photo for details.
FCC ID	2AK23-CB05
Mode of Operation	Bluetooth BLE Version 5.0

Frequency Range	2402MHz ~ 2480MHz
Modulation Type	GFSK
Antenna Type	PCB Antenna
Antenna Gain	1.225dBi
Hardware version	R5.109.00.1038C
Software version	V1.0

2 Maximum Permissible Exposure (MPE)

2.1 Limits

According to FCC Part 1.1307, systems operating under the provisions of this section shall be operated in a manner the ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidelines.

TABLE 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)	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

2.2 Assessment methods

Calculation Formula from FCC OET 65:

$$S = \frac{P * G}{4 * \pi * R^2}$$

Where:

S = Power Density (mW/cm2)

P = Input Power of the Antenna (mW)

G = Antenna Gain Relative to an Isotropic Antenna

R = Distance from the Antenna to the Point of Investigation (cm)

2.3 Test Result

Operation Mode	Frequency Range (MHz)	Max Conducted Power (dBm)	Antenna Gain (dBi)	Max EIRP (mW)	Power Density at R = 20 cm (mW/cm^2)	Limit (mW/cm^2)
BLE	2402 ~ 2480	-0.07	1.225	1.31	0.00026	1.0

Note(s):

1. For 300 – 1,500MHz: Power Density limit is f/1500 mW/cm2
2. For 1,500 – 100,000MHz: Power Density limit is 1.0 mW/cm^2

2.4 Conclusion

The Power Density at the position which is 20 cm far from the EUT is smaller than the General Population/Uncontrolled Exposure limit.

3 Appendixes

3.1 Sample Photograph

CB05BF

Front of the sample

Rear of the sample

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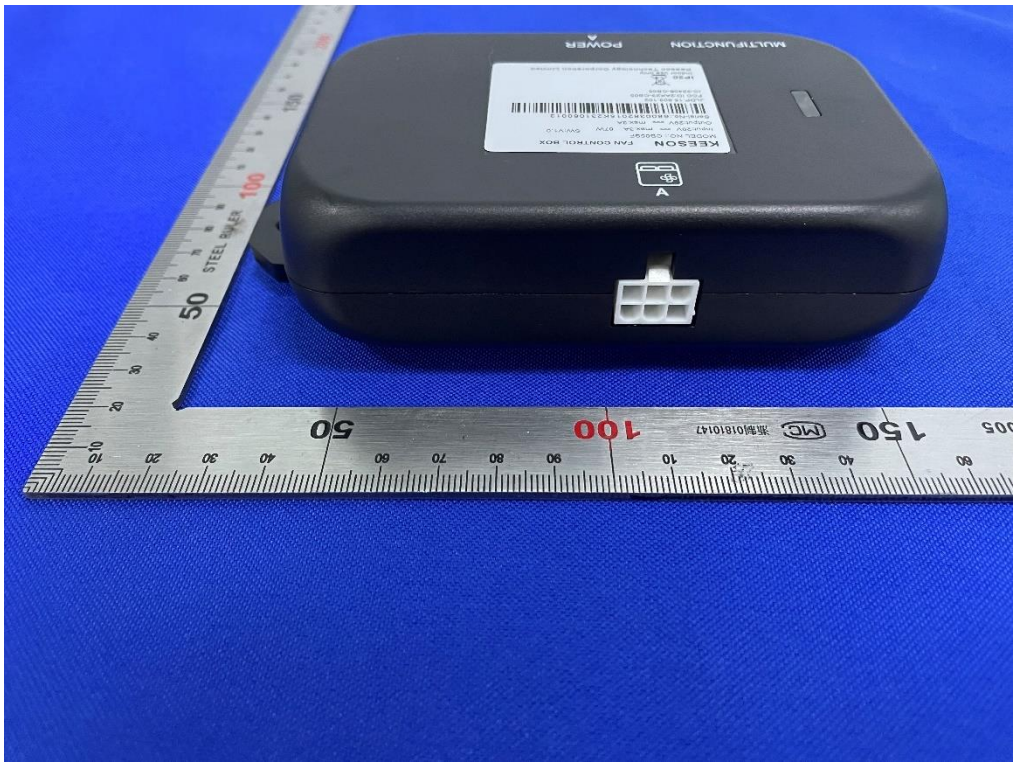
CB05SF

Front of the sample



Rear of the sample

End of the report