

RF TEST REPORT

Product Name: Air aromatherapy purifier

Model Name: WG-03

FCC ID: 2BGEGWG-03

Issued For : SUNRISE TECHNICAL CO., LTD.

No. 36, TaiKang Street, Baihao, HouJie Town, Dongguan, Guangdong, China

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

Report Number:	LGT24D094HA01
Sample Received Date:	Apr. 17, 2024
Date of Test:	Apr. 17, 2024 – May 09, 2024
Date of Issue:	May 09, 2024

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TEST REPORT CERTIFICATION

Applicant:	SUNRISE TECHNICAL CO., LTD.
Address:	No. 36, TaiKang Street, Baihao, HouJie Town, Dongguan, Guangdong, China
Manufacture:	SUNRISE TECHNICAL CO., LTD.
Address:	No. 36, TaiKang Street, Baihao, HouJie Town, Dongguan, Guangdong, China
Product Name:	Air aromatherapy purifier
Trademark:	Hombreez
Model Name:	WG-03
Sample Status:	Normal

APPLICABLE STANDARDS					
STANDARD	TEST RESULTS				
FCC 47 CFR §2.1091 KDB 447498 D01 General RF Exposure Guidance v06	PASS				

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Revision History

Rev.	Issue Date	Revisions
00	May 09, 2024	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	Air aromatherapy purifier				
Trademark:	Hombreez				
Model Name:	WG-03	WG-03			
Series Model:	N/A				
Model Difference:	N/A				
Frequency Bands:	2.4G WLAN 802.11b/g/n(20MHz): 2412~2462MHz				
Adapter:	Input: 100-240V, 50/60Hz, 0.6A Output: DC 5.0V, 2000A				
Hardware Version:	N/A				
Software Version:	N/A	N/A			

1.2 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.	
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China	
	A2LA Certificate No.: 6727.01	
Accreditation Certificate	FCC Registration No.: 746540	
	CAB ID: CN0136	



2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the

environmental impact of the human exposure to radio-frequency (RF) radiation as specified in 1,1307 (b)

1.1307 (b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range	Electric Field	Magnetic Field	Power Density								
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm²)								
Limits for Occupational	/ controlled Exposures										
300 - 1500 F/300											
1500 - 100000			5.0								
Limits for General popu	lation / Uncontrolled Exp	osure									
300 - 1500			F/1500								
1500 - 100000			1.0								
F= Frequency in MHz											
Friss Formula											
Friss Transmission Formula: Pd = (Pout * G) / (4*pi*r ²)											
Where											
Pd = power density in m	W/cm ²										
Pout = output power to a	intenna in mW										
C – agin of optoppo in linear coolo											

G = gain of antenna in linear scale

Pi = 3.1416

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

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.

2.3 EUT OPERATION CONDITION

EUT was enabled to transmit and receive at lowest, middle and highest channels.

2.4 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. Warning statement to the user for keeping at least 20cm or more separation distance from the antenna should be included in the User manual. So, this device is classified as Mobile device.



2.5 TEST RESULT

Turn up Result

Mode	Turn up Power
2.4G WIFI-802.11b	16.5±1dBm
2.4G WIFI-802.11g	15.5±1dBm
2.4G WIFI-802.11n(HT20)	15.5±1dBm



The MPE result of worst mode:

RF Function	Frequency (MHz)	Max Turn up Power (dBm)	Max Turn up Power (mW)	ANT Gain (dBi)	ANT Gain (gain of antenna in linear scale)	Power Density (mW/c m²)	Limit (mW/cm²)	Ratio	Result
2.4G WIFI	2462	17.50	56.23	2.5	1.78	0.020	1	0.02 0	Pass

Note: The Maximum Power Density is less than the limit, complies with the exemption requirements.

* * * * * END OF THE REPORT * * * *