

RF EXPOSURE REPORT

OF

Applicant: Zorachka LTD
ALPHA TOWER, Floor 1, Flat 11, Pavlou Nirvana & Aipeias,
3021 Limassol, Cyprus

Product Name: Homam

Brand Name: Zorachka

Model No.: C1132

Model Difference: N/A

Report Number: ER/2020/20062

FCC ID: 2AWBH-C1132

IC: 25832-C1132

FCC Rule Part Part 2.1091

IC Rule: RSS-102 issue 5 Mar. 19, 2015

Issue Date: Jul. 02, 2020

We hereby certify that:

The above equipment was verified by SGS Taiwan Ltd. The evaluation in this report is in compliance with the above rule(s).

The results of this report relate only to the sample identified in this report.

Approved By: _____

John Teh

John Yeh / Asst. Manager

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
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Revision History

Report Number	Revision	Description	Issue Date	Remark
ER/2020/20062	Rev.00	Original.	Jul. 02, 2020	Revised By: Karen Huang

Note:

1. Disclaimer

Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

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1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

1.1 General:

Product Name:	Homam	
Brand Name:	Zorachka	
Model No.:	C1132	
Model Difference:	N/A	
Hardware Version:	1.3.1	
Software Version:	1.x.x	
USB Cable	Model No.: N/A, Supplier: Zorachka	
Power Supply:	5Vdc from Adapter	
	Adapter:	Model No.: PS-10U5 Supplier: Zorachka

1.2 Maximum Output power

The Max. output power value is derived from test report.

Bluetooth LE	Report Number:	ER/2020/20059
	Test Lab:	SGS Taiwan Ltd. Central RF Lab
Bluetooth	Report Number:	ER/2020/20058
	Test Lab:	SGS Taiwan Ltd. Central RF Lab
WLAN 2.4GHz	Report Number:	ER/2020/20060
	Test Lab:	SGS Taiwan Ltd. Central RF Lab
WLAN 5GHz	Report Number:	ER/2020/20061
	Test Lab:	SGS Taiwan Ltd. Central RF Lab

Note: EUT serial number is WFB0054.

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1.3 Antenna Information:

1.3.1 BT / WLAN 2.4GHz

Antenna Type	Supplier	Antenna Part No.	Freq.	Peak Antenna Gain (dBi)	MIMO Antenna Gain (dBi)
Flex	molex	2042810100	2.4GHz	2.00	5.01
		2042810100		2.00	5.01

1.3.2 WLAN 5GHz

Antenna Type	Supplier	Antenna Part No.	Note
Flex	molex	2042810100	Ant 1
Flex	molex	2042810100	Ant 2

Operating Frequency (MHz)	Ant 1 Peak Gain (dBi)	Ant 2 Peak Gain (dBi)	MIMO Antenna Gain (dBi)
5150.0 ~ 5250.0	3.30	3.30	6.31
5250.0 ~ 5350.0	3.30	3.30	6.31
5470.0 ~ 5725.0	3.30	3.30	6.31
5725.0 ~ 5850.0	3.30	3.30	6.31

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2 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1 FCC Standard Applicable

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for Maximum Permissive Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
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
1500-15000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equipment power density

Prediction of MPE limit at a given distance

$$S = PG / 4\pi R^2$$

Where: S = Power density

P = Power input to antenna

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

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2.2 Power Density Calculation (Worst Case)

FCC Standalone MPE

Operation Mode	Evaluation Frequency (MHz)	Operation Distance (cm)	Max. output Power (dBm)	Antenna Gain (dBi)	Max. output Power EIRP (mW)	Power Density (PD) (mW/cm ²)	Limit (mW/cm ²)	Pass / Fail	Power Density / Limit
BT	2402.00	20	1.31	3.30	2.89	0.001	1.000	Pass	0.001
BLE	2402.00	20	1.04	3.30	2.72	0.001	1.000	Pass	0.001
WLAN 2.4G	2462.00	20	15.88	5.01	122.74	0.024	1.000	Pass	0.024
WLAN 5G	5300.00	20	14.99	6.31	134.90	0.027	1.000	Pass	0.027

2.3 Collocated Power Density Calculation

FCC Collocated MPE

Max BT PD / Limit	Max WLAN PD / Limit	Σ (Power Density / Limit) of BT+ WLAN + WWAN
0.001	0.027	0.028

Note:

1. Σ (E- Field Strength / Limit): This is a summation of [(E- Field Strength for each transmitter/antenna included in the simultaneous transmission) / (corresponding MPE limit)].
2. Considering the collocated transmitters, the aggregated (E- Field Strength /limit) is smaller than 1, and MPE of collocated transmitters is compliant

~ End of Report ~

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