Shenzhen Most Technology Service Co., Ltd.
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Hi-tech Industry Park, Nanshan,Shenzhen,Guangdong,China

RF Exposure Evaluation Report

Report Reference No......:	**MTEB24050269-H**
FCC ID..... **:**	**2BAA5-G130**
Compiled by (position+printed name+signature)..:	File administrators Alisa Luo
Supervised by (position+printed name+signature)..:	Test Engineer Sunny Deng
Approved by (position+printed name+signature)..:	Manager Yvette Zhou
Date of issue.....:	May 28,2024
Representative Laboratory Name .:	**Shenzhen Most Technology Service Co., Ltd.**
Address .....:	No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.
Applicant's name.....:	**AcoustMax International Corporation**
Address .....:	Room 501,Lingyun Building ,HongLang North 2 Road, Baoan District, ShenZhen, China
Test specification/ Standard .....**:**	**47 CFR Part 1.1307;47 CFR Part 1.1310** **KDB447498D01 General RF Exposure Guidance v06**
TRF Originator.....:	Shenzhen Most Technology Service Co., Ltd.

Test item description .....:	Monster GI30
Trade Mark .....:	Monster
Model/Type reference.....:	MNGI30
Listed Models .....:	MNGI30-2,MNGI30 Plus,MNGI30-X,MNGI30-C, MNIG30-S-2,MNGI30-SPORT
Modulation Type .....:	GFSK GFSK, π/4DQPSK, 8DPSK
Operation Frequency.....:	2402MHz to 2480MHz
Hardware Version.....	V02
Software Version	V05
Rating .....:	AC100-240V~50/60Hz 600W
Result.....:	**PASS**

T E S T R E P O R T

Equipment under Test	:	Monster GI30
Model /Type	:	MNGI30
Listed Models	:	MNGI30-2,MNGI30 Plus,MNGI30-X,MNGI30-C, MNIG30-S-2,MNGI30-SPORT
Remark		It's just that the product models are called differently
Applicant	:	**AcoustMax International Corporation**
Address	:	Room 501,Lingyun Building ,HongLang North 2 Road, Baoan District, ShenZhen, China
Manufacturer	:	**Ningbo Polinata Electronics Co., Ltd**
Address	:	NO. 9 XINRUI ROAD, LONGXING VILLAGE, WUXIANG TOWN, YINZHOU DISTRICT, NINGBO

Test Result:	**PASS**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024.05.28	Initial Issue	Alisa Luo

2. SAR Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
4.3.1. Standalone SAR test exclusion considerations
Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.1.2 Limits

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

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 Exposures				
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
300–1500	.....	.....	f/300	6
1500–100,000	.....	.....	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
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

F= Frequency in MHz
Friis Formula
Friis transmission formula: Pd = (Pout*G)/(4* Pi * R 2) Where
Pd = power density in mW/cm2
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
Pd id the limit of MPE, 1 mW/cm2 . If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2.1.3 EUT RF Exposure

BLE

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402 MHz)	0.378	0.378±1	1.378
Middle(2440MHz)	-0.396	-0.396±1	0.604
Highest(2480MHz)	0.367	0.367±1	1.367

BLE

Worst case: GFSK						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Lowest(2402 MHz)	1.378	1.37	0	0.00027	1.0	Pass

Note: 1) Refer to report MTEB24050269-R for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R2)=(1.37*1)/(4*3.1416*20^2)=0.00027

BT classic

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	-0.832	-0.832±1	0.168
Middle(2441MHz)	-0.443	-0.443±1	0.557
Highest(2480MHz)	-0.608	-0.608±1	0.392

π /4DQPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	-0.002	-0.002±1	0.998
Middle(2441MHz)	0.395	0.395±1	1.395
Highest(2480MHz)	0.261	0.261±1	1.261

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	0.176	0.176±1	1.176
Middle(2441MHz)	0.611	0.611±1	1.611
Highest(2480MHz)	0.572	0.572±1	1.572

Worst case: 8DPSK						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Middle(2441MHz)	1.611	1.45	0	0.00029	1.0	Pass

Note: 1) Refer to report MTEB24050269-R1 for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R2)=(1.45*1)/(4*3.1416*202)=0.00029
Note: 3)EUT's Bluetooth module is more than 20cm away from the human body.

.....THE END OF REPORT.....