Shenzhen Most Technology Service Co., Ltd.
No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.

RF Exposure Evaluation Report

Report Reference No..... :	**MTEB24050014-H**	
FCC ID..... :	**2ALZG-327**	
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 07,2024**	
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..... :	**Qingdao Magene Intelligence Technology Co., Ltd.**	
Address..... :	Room 302, Building 3, No.328A Chengkang Road, Xiazhuang Subdistrict, Chengyang District, Qingdao, Shandong, China.	
Test specification/ Standard.....**:**	**47 CFR Part 1.1307;** **47 CFR Part 1.1310**	
TRF Originator..... :	Shenzhen Most Technology Service Co., Ltd.	

Test item description.....:	AT Series Smart Bike Headlight
Trade Mark..... :	Magene
Model/Type reference..... :	P0108307(This model have two versions of AT1200 and AT1600, which control brightness differences through firmware.)
Listed Models ..... :	N/A
Modulation Type..... :	GFSK
Operation Frequency..... :	From 2402 - 2480MHz 2457MHz
Rating..... :	Input: 5.0V⎓,2.0A, Output: 5.0V⎓,2.0A Battery: 3.6V, 5.0Ah
Hardware version..... :	1.0
Software version ..... :	1.0
Result..... :	**PASS**

T E S T R E P O R T

Equipment under Test	:	AT Series Smart Bike Headlight
Model /Type	:	P0108307(This model have two versions of AT1200 and AT1600, which control brightness differences through firmware.)
Listed Models	:	N/A
Remark		N/A
Applicant	:	Qingdao Magene Intelligence Technology Co., Ltd.
Address	:	Room 302, Building 3, No.328A Chengkang Road, Xiazhuang Subdistrict, Chengyang District, Qingdao, Shandong, China.
Manufacturer	:	Qingdao Magene Intelligence Technology Co., Ltd.
Address	:	Room 302, Building 3, No.328A Chengkang Road, Xiazhuang Subdistrict, Chengyang District, Qingdao, Shandong, China.

Test Result:	**PASS**

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024.05.07	Initial Issue	Alisa Luo

2. SAR Evaluation

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

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation[17]
The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

2.1.3 EUT RF Exposure

BLE
Antenna Gain: 0dBi

GFSK				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-1.405	-1.405±1	-0.405	0.91
Middle(2440MHz)	-1.928	-1.928±1	-0.928	0.81
Highest(2480MHz)	-0.631	-0.631±1	0.369	1.09

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Highest (2480MHz)	-0.631	0.369	1.09	0.24	3.0	Yes

Note: 1) Refer to report **MTEB24050014-R** for EUT test Max Conducted average Output Power value.

ANT+
Antenna Gain: 0dBi

GFSK				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
CH1(2457MHz)	-1.91	-1.91±1	-0.91	0.81

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
CH1(2457MHz)	-1.91	-0.91	0.81	0.24	3.0	Yes

Note: 1) Refer to report **MTEB24050014-R1** for EUT test Max Conducted average Output Power value.

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