



Shenzhen Most Technology Service Co., Ltd.

East A, 1 floor of New Aolin Factory buiding, Langshan Erlu, North District,
Hi-tech Industry Park, Nanshan, Shenzhen, Guangdong, China

RF Exposure Evaluation Report

Report Reference No...... : **MTEB24020004-H**

FCC ID..... : **2BEX4-DK-42AI**

Compiled by

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Supervised by

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Date of issue.....: Feb. 01,2024

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.....: **Bokang Technology Co., LTD**

Address.....: No.467 Dongwu Road, Yongkang Economic Development Zone,
Jinhua City, Zhejiang Province, 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.

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Test item description.....: Electric Treadmill

Trade Mark.....: N/A

Model/Type reference.....: DK-42AI

Listed Models: DK-38AB, DK-38AA, AD-4000, DK-40AD, DK-05AK, DK-05AJ, DK-12AI, DK-12AD, DK-12AF, DK-12AM, DK-19AF, DK-40AA, DK-40AB, DK-42AD, DK-42AE, DK-42AF, DK-42AJ, DK-42AQ, DK-42AO, DK-42AR, DK-42AU, DK-42AT, DK-42AK, DK-42AN, DK-42AL, DK-45AH

Modulation Type.....: GFSK
GFSK, $\pi/4$ DQPSK, 8DPSK

Operation Frequency.....: From 2402MHz to 2480MHz

Hardware Version.....: /

Software Version.....: 2.1.4

Rating.....: AC 110V 60Hz 800W

Result.....: **PASS**

TEST REPORT

Equipment under Test : Electric Treadmill

Model /Type : DK-42AI

Listed Models : DK-38AB, DK-38AA, AD-4000, DK-40AD, DK-05AK, DK-05AJ, DK-12AI, DK-12AD, DK-12AF, DK-12AM, DK-19AF, DK-40AA, DK-40AB, DK-42AD, DK-42AE, DK-42AF, DK-42AJ, DK-42AQ, DK-42AO, DK-42AR, DK-42AU, DK-42AT, DK-42AK, DK-42AN, DK-42AL, DK-45AH

Remark : Same product, but different model name

Applicant : Bokang Technology Co., LTD

Address : No.467 Dongwu Road, Yongkang Economic Development Zone, Jinhua City, Zhejiang Province, China

Manufacturer : Bokang Technology Co., LTD

Address : No.467 Dongwu Road, Yongkang Economic Development Zone, Jinhua City, Zhejiang Province, China

Test Result:	PASS
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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	2024.02.01	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: $P_d = (P_{out} * G) / (4 * \pi * R^2)$ Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

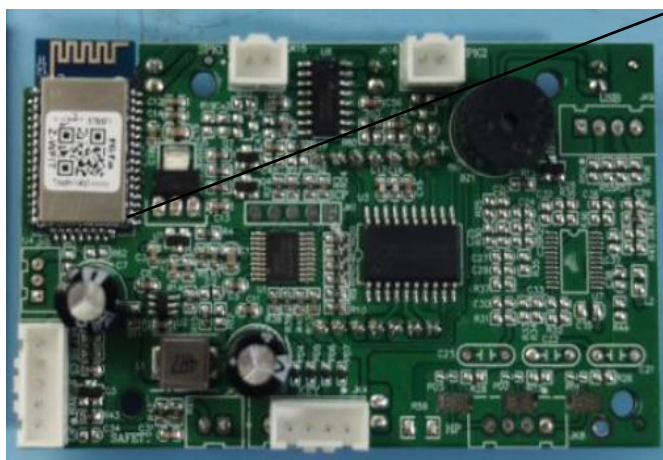
R = distance between observation point and center of the radiator in cm

P_d is 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 Module position



Module position



Note: The Bluetooth module is located on the back of the motherboard of the product screen. Bluetooth module is more than 20cm away from the human body.

2.1.4 EUT RF Exposure

Antenna Gain: -1.11dBi

BLE

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402 MHz)	6.950	6.950±1	7.95
Middle(2440MHz)	7.395	7.395±1	8.395
Highest(2480MHz)	7.787	7.787±1	8.787

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/cm ²)	Limit	Result
Highest(2480MHz)	8.787	7.56	-1.11dBi	0.0012	1.0	Pass

Note: 1) Refer to report MTEB24020004-R for EUT test Max Conducted average Output Power value.

Note: 2) $P_d = (P_{out} * G) / (4 * \pi * R^2) = (7.56 * 0.77) / (4 * 3.1416 * 20^2) = 0.0012$

Note: 3) EUT's Bluetooth module is more than 20cm away from the human body.

BT classic

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-0.398	-0.398 ± 1	0.602
Middle(2441MHz)	0.290	0.290 ± 1	1.29
Highest(2480MHz)	0.465	0.465 ± 1	1.465

$\pi/4$ DQPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	0.539	0.539 ± 1	1.539
Middle(2441MHz)	1.131	1.131 ± 1	2.131
Highest(2480MHz)	1.315	1.315 ± 1	2.315

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	0.957	0.957 ± 1	1.957
Middle(2441MHz)	1.602	1.602 ± 1	2.602
Highest(2480MHz)	1.732	1.732 ± 1	2.732

Worst case: 8DPSK						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm ²)	Limit	Result
Highest(2480MHz)	2.732	1.88	-1.11dBi	0.0003	1.0	Pass

Note: 1) Refer to report MTEB24020004-R1 for EUT test Max Conducted average Output Power value.

Note: 2) $P_d = (P_{out} * G) / (4 * \pi * R^2) = (1.88 * 0.77) / (4 * 3.1416 * 20^2) = 0.0003$

Note: 3) EUT's Bluetooth module is more than 20cm away from the human body.

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