

RF Exposure Evaluation Report

Report Reference No...... : **MTEB25120125-H**

FCC ID..... : **2BTOP-ECOX3**

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Applicant's name.....: **EYUE TECHNOLOGY CO., LTD**

Address.....: 2F, XINWANGYUAN HIGH-TECH INDUSTRIAL PARK,
ZHANGMUTOU TOWN, DONGGUAN, GUANGDONG, 523627
CHINA

Test specification/ Standard.....: **47 CFR Part 1.1307**
47 CFR Part 2.1093

TRF Originator.....: Shenzhen Most Technology Service Co., Ltd.

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Test item description.....: Bluetooth speaker

Trade Mark.....: N/A

Model/Type reference.....: ECO X3

Listed Models: ECO X4, ECO X5, ECO X6, ECO X7, ECO X8, ECO X9

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

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

Hardware Version.....: V.01

Software Version.....: V.01

Rating.....: DC 12V by Adapter

Result.....: PASS

TEST REPORT

Equipment under Test : Bluetooth speaker

Model /Type : ECO X3

Listed Models : ECO X4, ECO X5, ECO X6, ECO X7, ECO X8, ECO X9

Remark : Only the model MECO X3 was tested, The electrical circuit design, layout, components used and internal wiring are identical, Only the model names and appearance colour are different.

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Address : 2F, XINWANGYUAN HIGH-TECH INDUSTRIAL PARK,
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Manufacturer : EYUE TECHNOLOGY CO., LTD

Address : 2F, XINWANGYUAN HIGH-TECH INDUSTRIAL PARK,
ZHANGMUTOU TOWN, DONGGUAN, GUANGDONG, 523627
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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	2025.12.10	Initial Issue	Ekaterina Zhang

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

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:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \left[\sqrt{f(\text{GHz})} \right]$$

 ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

. 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

Measurement Data

BLE

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	2.14	2.14 ± 1	3.14
Middle(2440MHz)	1.74	1.74 ± 1	2.74
Highest(2480MHz)	1.20	1.20 ± 1	2.20

Worst case: GFSK

Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Lowest(2402MHz)	2.14	3.14	2.06	1.60	3.0	Yes

EDR

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-0.94	-0.94 ± 1	0.06
Middle(2441MHz)	-1.32	-1.32 ± 1	-0.32
Highest(2480MHz)	-1.81	-1.81 ± 1	-0.81

 $\pi/4$ DQPSK

Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-0.08	-0.08 ± 1	0.92
Middle(2441MHz)	-0.46	-0.46 ± 1	0.54
Highest(2480MHz)	-0.99	-0.99 ± 1	0.01

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	0.34	0.34 ± 1	1.34
Middle(2441MHz)	0.00	0.00 ± 1	1.00
Highest(2480MHz)	-0.49	-0.49 ± 1	0.51

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Lowest(2402MHz)	0.34	1.34	1.36	1.05	3.0	Yes

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