

RF EXPOSURE REPORT

FOR

Applicant	:	FOSHAN SANMAK LIGHTING CO.,LTD
Address	:	Block 3, Chuangfu Industry Zone, Lihe Rd., Nanhai District, Foshan City, 528244 China
Equipment under Test	:	2210 Box Controller
Model No.	:	4005-012
Trade Mark	:	
FCC ID	:	2AVYD4005-012
Manufacturer	:	FOSHAN SANMAK LIGHTING CO.,LTD
Address	:	Block 3, Chuangfu Industry Zone, Lihe Rd., Nanhai District, Foshan City, 528244 China

Issued By: Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park,
Dongguan City, Guangdong Province, China, 523808

Tel.: +86-0769-38826678, **E-mail:** ddt@dgddt.com, <http://www.dgddt.com>

REPORT

Table of Contents

	Test report declares.....	3
1.	General Information	5
1.1.	Description of equipment	5
1.2.	Assess laboratory.....	5
2.	RF Exposure evaluation for FCC.....	6

Test Report Declare

Applicant	:	FOSHAN SANMAK LIGHTING CO.,LTD
Address	:	Block 3, Chuangfu Industry Zone, Lihe Rd., Nanhai District, Foshan City, 528244 China
Equipment under Test	:	2210 Box Controller
Model No.	:	4005-012
Trade mark	:	
Manufacturer	:	FOSHAN SANMAK LIGHTING CO.,LTD
Address	:	Block 3, Chuangfu Industry Zone, Lihe Rd., Nanhai District, Foshan City, 528244 China

Standard Used: KDB447498 D01 General RF Exposure Guidance v06

We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd. and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No:	DDT-RE23041818-2E02		
Date of Receipt:	Apr. 28, 2023	Date of Test:	Apr. 28, 2023 ~ May 22, 2023

Prepared By:

Johnny Wang

Johnny Wang/Engineer

Approved By:



Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	May 22, 2023	

1. General Information

1.1. Description of equipment

EUT Name	: 2210 Box Controller
Model Number	: 4005-012
EUT Function Description	: Please reference user manual of this device
Power Supply	: DC 12V
Operation Frequency	: 433.92 MHz
Modulation	: OOK
Antenna Gain	: Spring antenna, maximum PK gain: -10.25 dBi
Sample Number	: S23041818-01

1.2. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

2. RF Exposure evaluation for FCC

According to 447498 D01 General RF Exposure Guidance v06

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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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 calculation

The result is rounded to one decimal place for comparison

Manufacturing Tolerance

SRD

GFSK (Peak)	
Frequency (MHz)	433.92
Target (dBm)	-7.54
Tolerance $\pm$ (dB)	1

Note:

PK Output Power=87.66dBuV/m@3m-95.2=-7.54dBm

Please refer to the test report "DDT-RE23041818-2E01"

Estimation Result

Worse case is as below: [433.92 MHz, -6.54 dBm, (0.2218 mW) output power]

$(0.2218 / 5) \cdot [\sqrt{0.43392(\text{GHz})}] = 0.03 < 3.0$ for 1-g SAR

Then SAR evaluation is not required.

END OF REPORT