

TEST REPORT

Applicant: Sky Light Electronic (ShenZhen) Limited
Address: 1No. 8 Building 1F-5F & 9 Building 1F-2F,
AnTuoShan High-tech Industrial Park, XinSha
Road, ShaJing, Bao'An, Shenzhen.
Equipment Type: LVD05-Sub-1G
Model Name: EP-FPC-LVD01S1G-03
Brand Name: N/A
Test Standard: ANSI/IEEE Std 149-1979
Test Date: Sep. 19, 2022
Date of Issue: Sep. 22, 2022

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Mai Jintian

Checked by: Tolan Tu

Approved by: Wei Yanquan
(Chief Engineer)

Mai Jintian

Tolan Tu

Wei Yanquan

Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Sep. 22, 2022</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION.....	3
1.1	Test Laboratory	3
1.2	Test Location.....	3
2	PRODUCT INFORMATION	4
2.1	Applicant Information.....	4
2.2	Manufacturer Information	4
2.3	Factory Information	4
2.4	General Description for Equipment under Test (EUT)	4
2.5	Ancillary Equipment.....	4
2.6	Technical Information	4
3	SUMMARY OF TEST RESULTS	5
3.1	Test Standards.....	5
3.2	Test Verdict.....	5
3.3	Test Uncertainty	5
4	GENERAL TEST CONFIGURATIONS	6
4.1	Test Condition	6
4.2	Test Equipment List.....	6
4.3	Test Setup.....	6
	ANNEX A TEST RESULTS.....	7
A.1	Gain and Efficiency	7
	ANNEX B RADIATION PATTERN	8
	ANNEX C TEST SETUP PHOTO.....	10
	ANNEX D EUT PHOTO	11

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☒ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Sky Light Electronic (ShenZhen) Limited
Address	1No. 8 Building 1F-5F & 9 Building 1F-2F, AnTuoShan High-tech Industrial Park, XinSha Road, ShaJing, Bao'An, Shenzhen.
Contact Person	Jiang Liang Yong
Telephone Number	13302940314
Fax Number	86-755-27511777
E-mail Address	jiangliangyong@sky-light.com.hk

2.2 Manufacturer Information

Manufacturer	Sky Light Electronic (ShenZhen) Limited
Address	1No. 8 Building 1F-5F & 9 Building 1F-2F, AnTuoShan High-tech Industrial Park, XinSha Road, ShaJing, Bao'An, Shenzhen.

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	LVD05-Sub-1G
Model Name Under Test	EP-FPC-LVD01S1G-03
Antenna Type	PCB Antenna
Dimensions	17*56 mm

2.5 Ancillary Equipment

Note: Not applicable.

2.6 Technical Information

Frequency Range	403MHz~493MHz
Test Frequencies	403MHz, 413MHz, 423MHz, 433MHz, 443MHz, 453MHz, 463MHz, 473MHz, 483MHz, 493MHz

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	ANSI/IEEE Std 149-1979	IEEE Standard Test Procedures for Antennas

3.2 Test Verdict

Report Section	Description	Remark
ANNEX A.1	Gain and Efficiency	--

3.3 Test Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Item	Uncertainty
Gain	$\pm 1.92\text{dB}$

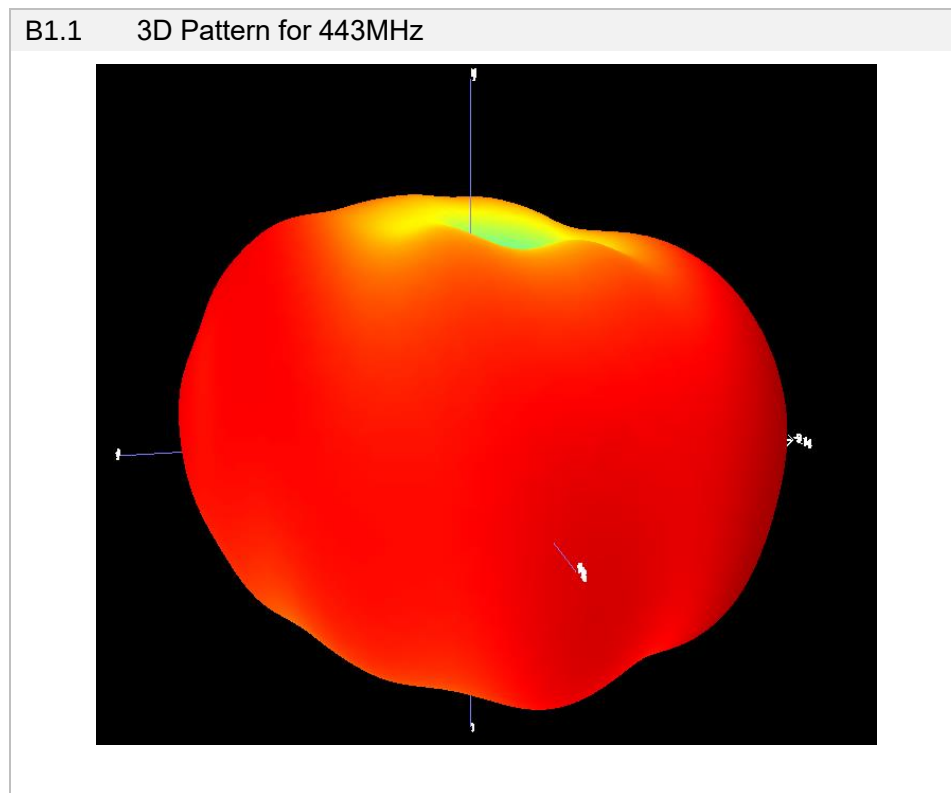
ANNEX A TEST RESULTS

A.1 Gain and Efficiency

Frequency	Gain (dBi)	Efficiency (%)
403MHz	-15.77	1%
413MHz	-14.53	1%
423MHz	-11.83	2%
433MHz	-9.14	5%
443MHz	-8.75	5%
453MHz	-10.19	3%
463MHz	-11.86	2%
473MHz	-13.57	1%
483MHz	-14.57	1%
493MHz	-14.83	1%

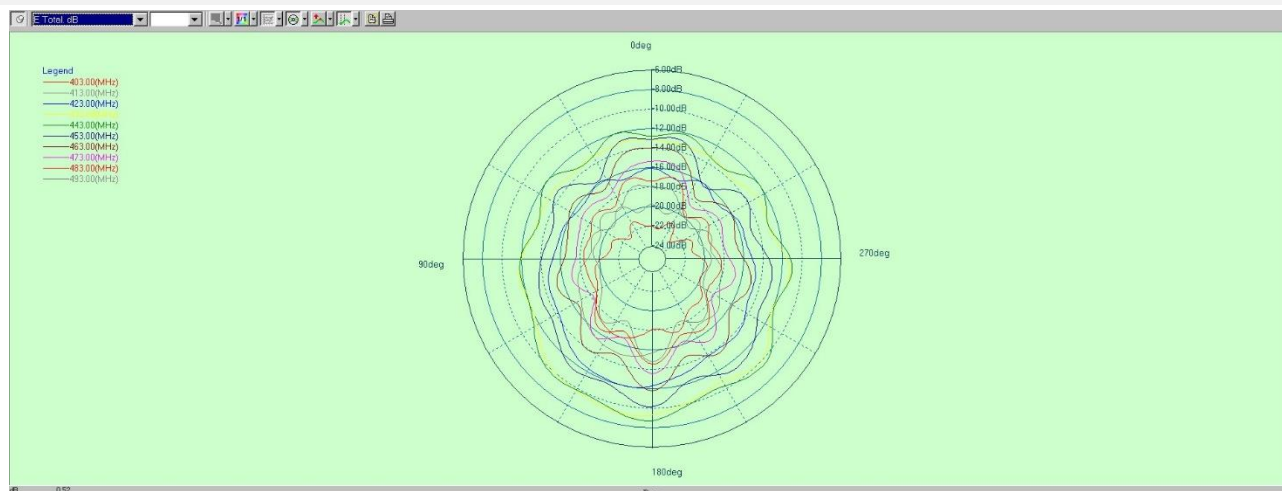
ANNEX B RADIATION PATTERN

B.1 3D Pattern

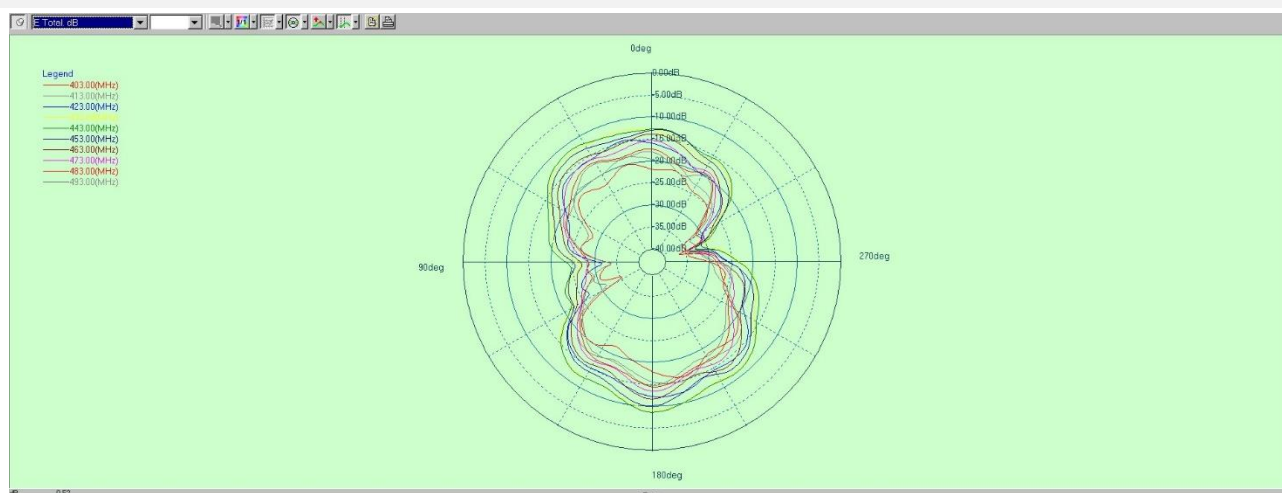


B.2 1D Radiation Pattern

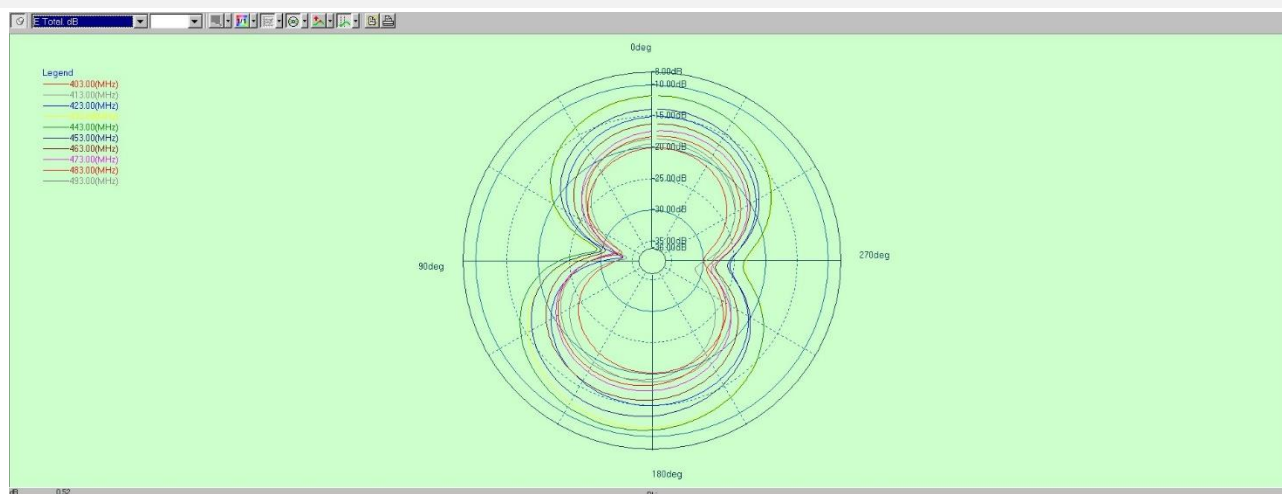
B2.1 PHI=0



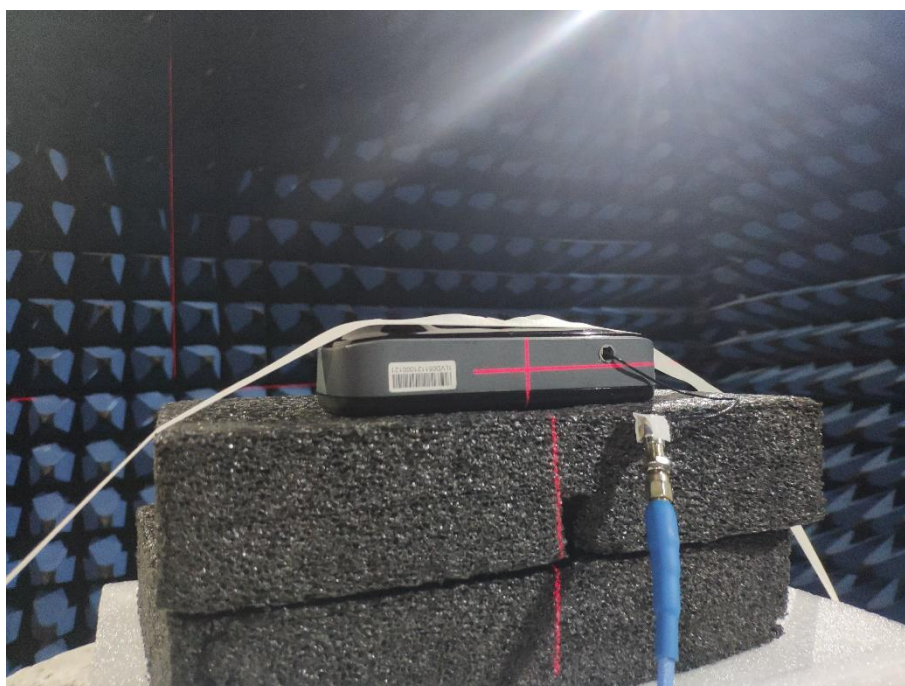
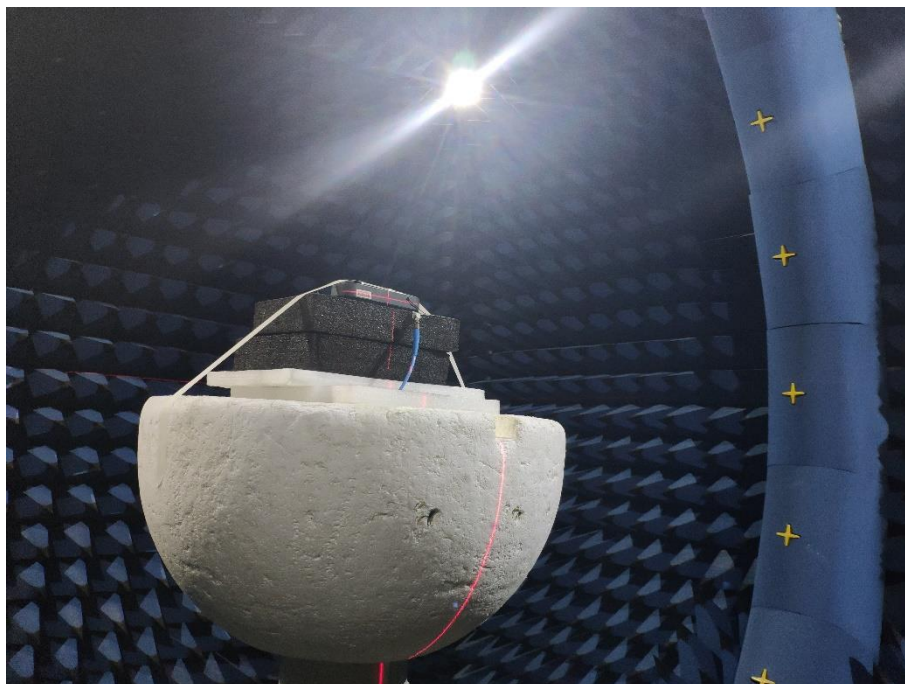
B2.2 PHI=90



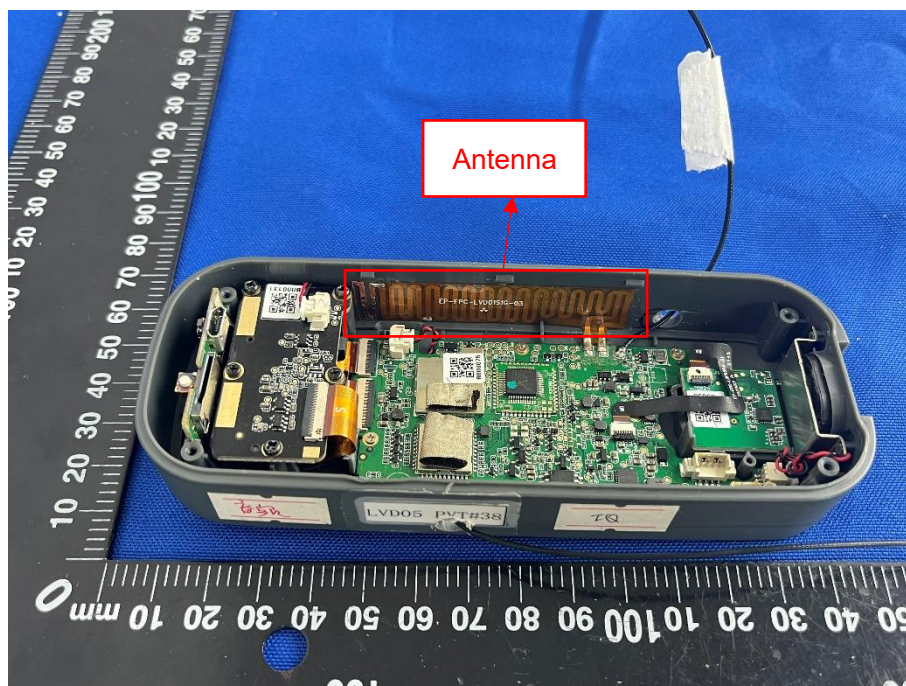
B2.3 THETA=90



ANNEX C TEST SETUP PHOTO



ANNEX D EUT PHOTO



Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--