



TEST REPORT

Report No.: SHATBL2508013W04

Applicant : SHENZHEN NANXIN TECHNOLOGY CO.,LTD

Product Name : Smart Star Projector with HD Films

Brand Name : N/A

Model Name : SK17

Series model : SK11,SK13,SK15,SK19,SK20,SK21,SK22,SK23,SK25,SK26,
SK27,SK28,SK29,SK30,SK31,SK33,SK35,SK36,SK37,SK39,
SC01,SC03,SC05,SC07,SC09,JS11,JS13,JS15,JS17,JS19,
SF01,SF02,SF03,SF05,SF07,SF09,FS01,FS03,FS05,FS07,
FS09,SP01,SP03,SP05,SP07,SP09,WS31,WS33,WS35,WS37,
WS39,TC01,TC03,TC05,TC7X,TR01,TR03,TR05,TR07,TR0X

Test Standard : 47 CFR Part 2.1091

FCC ID : 2A5ET-SK17

Date of Sample Arrival : May.22,2025

Date of Test : May.22,2025~Jul.31,2025

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REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	Nov.19,2025	Initial Release	Ghost Li

DECLARATION OF REPORT

1. The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR Part 2.1091. And it is applicable only to the tested sample identified in the report.
2. This report shall not be reproduced except in full, without the written approval of ATBL, this document only be altered or revised by ATBL, personal only, and shall be noted in the revision of the document.
3. The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.
4. The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.
5. In this report, '☐' indicates that EUT does not support content after '☐', and '☑' indicates that it supports content after '☑'

1. GENERAL DESCRIPTION

1.1. Applicant

Name : SHENZHEN NANXIN TECHNOLOGY CO.,LTD
Address : 2nd floor, building A, Jiantao Science Park, Longhua District, Shenzhen, China

1.2. Manufacturer

Name : Jiangxi Lepowerlink Technology Co., Ltd
Address : On the north side of the third floor and the entire fourth floor of the Lithium Battery industrial Park factory area, Hengliu Road, Qianping Industrial Zone, Le an Industrial Park, Le an County, Fuzhou City, Jiangxi Province

1.3. Factory

Name : Jiangxi Lepowerlink Technology Co., Ltd
Address : On the north side of the third floor and the entire fourth floor of the Lithium Battery industrial Park factory area, Hengliu Road, Qianping Industrial Zone, Le an Industrial Park, Le an County, Fuzhou City, Jiangxi Province

1.4. General Information of EUT

General Information			
Equipment Name	Smart Star Projector with HD Films		
Brand Name	N/A		
Model Name	SK17		
Series Model	SK11,SK13,SK15,SK19,SK20,SK21,SK22,SK23,SK25,SK26,SK27,SK28,SK29,SK30,SK31,SK33,SK35,SK36,SK37,SK39,SC01,SC03,SC05,SC07,SC09,JS11,JS13,JS15,JS17,JS19,SF01,SF02,SF03,SF05,SF07,SF09,FS01,FS03,FS05,FS07,FS09,SP01,SP03,SP05,SP07,SP09,WS31,WS33,WS35,WS37,WS39,TC01,TC03,TC05,TC7X,TR01,TR03,TR05,TR07,TR0X		
Model Difference	The model name and appearance color are different.		
Operation Frequency	2412MHz - 2462MHz for 2.4GHz WIFI 2402MHz - 2480MHz for Bluetooth		
Modulation Type	DSSS/OFDM for 2.4GHz WIFI; GFSK for BLE;		
Antenna Information	WIFI	Antenna Type:	PCB Antenna
		Antenna Gain:	2.21dBi
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	Bluetooth	Antenna Type:	PCB Antenna
		Antenna Gain:	Voice Module 1(T1-U-HL):-0.23dBi
		Antenna Gain:	CBU:2.21dBi
Antenna Designation	PCB Antenna		
Power supply	Input:DC 5V		
Hardware Version	SK37 V2.2		
Software Version	1.0.8		
Connecting I/O Port(s)	Refer to the remark below.		

1.5. Laboratory Information

Company Name	:	Shanghai ATBL Technology Co., Ltd.
Address	:	5-6/F., Unit 1, No 8, Free Trade One Life Science and Sci-Tech Industrial Park No. 160, Basheng Road, Pudong New District Shanghai City, People's Republic of China
Telephone	:	+86(0)21-51298625
FCC-Registration No	:	485917
Designation Number	:	CN1306
A2LA-Lab Cert. No.	:	6184.01

2. FCC 47CFR §2.1091 Requirement

2.1. Test Standards

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

KDB447498 D01: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

2.2. Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
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

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 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

*=Plane-wave equivalent power density

2.3. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S=PG/4\pi R^2$$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

2.4. Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
WIFI(CBU)	2.21	PCB Antenna
BLE(CBU)	2.21	PCB Antenna
BLE(Voice Module 1(T1-U-HL))	-0.23	PCB Antenna

2.5. Manufacturing Tolerance

Function	Target (dBm)	Tolerance ± (dB)
Transmit		
WiFi 2.4GHzI(CBU)	15.975	1.00
BLE(CBU)	0.65	1.00
BLE(Voice Module 1(T1-U-HL))	-1.55	1.00

Note: The target power has included the maximum transmission power and tolerance values.

2.6. Test Result

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, $r=20\text{cm}$, as well as the gain of the used antenna is refer to section 4, the RF power density can be obtained.

Modulation Type	Max. Output power (Target)		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
2.4G WIFI	15.975	39.582	2.21	1.66	0.013	1.0000
BLE	0.65	1.161	2.21	1.66	0.00038	1.0000

Note:

- 1.The Maximum power is less than the limit, complies with the exemption requirements.
- 2.Output power including turn-up tolerance;
- 3.The calculated distance is 20 cm.
- 4.Does not support simultaneous transmission.

*****END OF THE REPORT*****