



RF Exposure Evaluation Report

Application No.: DNT2412130287R5662-09052

Applicant: Shengzhen Jiguo Guangying Technology Co.,Ltd
No. 306, Building 3, Tonggao Industrial Park, Songbai Road, Tangtou

Address of Applicant: Community, Shiyang Street Bao'an District, Shenzhen City, Guangdong Province

EUT Description: Smart Projector

Model No.: S1, S1pro, S1Air, CB1DV, CB1DVpro, CB1DVAir, CB1OV, Q1, Q1pro C-Q1, C-Q1pro, C-Q1Air, L-1, L-1pro, L-1S

FCC ID: 2BOEX-S1

Power supply AC 100-240V, 50/60Hz

Trade Mark: /
47 CFR Part 2.1091

Standards: FCC KDB 447498 D01 v06

Date of Receipt: 2025/01/01

Date of Test: 2025/01/02 to 2025/03/20

Date of Issue: 2025/03/21

Test Result: **PASS**

Prepared By: Wayne Lin (Testing Engineer)

Reviewed By: Pengfei Chen (Project Engineer)

Approved By: Heise Shen (Manager)



Note: If there is any objection to the results in this report, please submit a written inquiry to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp, and is issued by the company in accordance with the requirements of the "Conditions of Issuance of Test Reports" printed in the attached page. Unless otherwise stated, the results presented in this report only apply to the samples tested this time. Partial reproduction of this report is not allowed unless approved by the

Dongguan DN Testing Co., Ltd.

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company in writing.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Mar.21, 2025	Valid	Original Report



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1 General Information

1.1 Test Location

Company:	Dongguan DN Testing Co., Ltd
Address:	No. 1, West Fourth Street, South Xinfu Road, Wusha Liwu, Chang ' an Town, Dongguan City, Guangdong P.R.China
Test engineer:	Wayne Lin

1.2 General Description of EUT

Manufacturer:	Shengzhen Jiguo Guangying Technology Co.,Ltd
Address of Manufacturer:	No. 306, Building 3, Tonggao Industrial Park, Songbai Road, Tangtou Community, Shiyang Street Bao'an District, Shenzhen City, Guangdong Province
EUT Description::	Smart Projector
Test Model No.:	S1
Additional Model(s):	S1pro, S1Air, CB1DV, CB1DVpro, CB1DVAir, CB1OV, Q1, Q1pro C-Q1, C-Q1pro, C-Q1Air, L-1, L-1pro, L-1S
Chip Type:	EA6521QF
Serial Number	PR2412130287R5662
Power Supply	AC 100-240V,50/60Hz
Trade Mark:	N/A
Hardware Version:	V1.0
Software Version:	V1.0
Sample Type:	☐ Portable Device, ☐ Module, ☒ Mobile Device
Antenna Type:	☐ External, ☒ Integrated
Antenna Gain:	☒ Provided by applicant
	2.4G:2.13dBi
	5G:2.57dBi

Remark:

*All models are just color differences, motherboard, PCB circuit board, chip, electronic components, appearance is all the same.

*Since the above data and/or information is provided by the applicant relevant results or conclusions of this report are only made for these data and/or information , DNT is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.



2 RF Exposure Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Limits

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 *=Plane-wave equivalent power density RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).				

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.



2.1.2 Test Procedure

Software provided by client enabled the EUT to transmit data at lowest, middle and highest channel individually

2.1.3 EUT RF Exposure Evaluation

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 2.0 / 2.0 in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance:

This confirmed that the device comply with MPE limit.

Test Mode	Antenna	Freq(MHz)	Power [dBm]
GFSK	Ant1	2402	3.85
		2441	4.55
		2480	4.99
$\pi/4$ -DQPSK	Ant1	2402	6.71
		2441	7.17
		2480	6.91
8-DPSK	Ant1	2402	7.98
		2441	8.28
		2480	8.20
BLE 1M	Ant1	2402	8.38
		2440	8.51
		2480	8.16
BLE 2M	Ant1	2402	8.46
		2440	8.62
		2480	8.41
11B	Ant1	2412	18.91
		2437	18.74
		2462	15.52
11G	Ant1	2412	18.01
		2437	17.39
		2462	18.20
11N20(2.4G)	Ant1	2412	17.40
		2437	17.16
		2462	17.11
11N40(2.4G)	Ant1	2422	16.33
		2437	16.70
		2452	15.34
11AX20(2.4G)	Ant1	2412	17.39
		2437	17.38
		2462	18.08
11AX40(2.4G)	Ant1	2422	17.22
		2437	17.52
		2452	15.34
11A	Ant1	5180	10.46
		5200	11.77
		5240	10.67
		5745	11.42
		5785	10.99
11N20(5G)	Ant1	5825	11.60
		5180	10.83
		5200	12.22
		5240	11.21
		5745	11.58
11N40(5G)	Ant1	5785	12.99
		5825	13.97
		5190	14.42
		5230	12.86
		5755	12.40



11AC20(5G)	Ant1	5795	11.89
		5180	8.92
		5200	10.54
		5240	9.52
		5745	11.44
		5785	13.23
11AC40(5G)	Ant1	5825	13.54
		5190	10.04
		5230	12.49
		5755	12.22
11AX20(5G)	Ant1	5795	13.98
		5180	8.97
		5200	10.04
		5240	8.80
		5745	11.68
		5785	11.23
11AX40(5G)	Ant1	5825	11.90
		5190	9.80
		5230	9.54
		5755	12.24
		5795	13.69

The Worst Mode	Antenna	Peak output power (dBm)	Target power (dBm)	MAX Target power (dBm)	Antenna gain		Power Density (S) (mW /cm ²)	Limited of Power Density (S) (mW /cm ²)	Test Result	Distance (cm)
					(dBi)	(Linear)				
BLE	Ant1	8.62	8±1	9	2.13	1.6331	0.0026	1	Complies	20
2.GWIFI	Ant1	18.91	18±1	19	2.13	1.6331	0.0258	1	Complies	20
5GWIFI	Ant1	14.42	14±1	15	2.57	1.8072	0.0114	1	Complies	20

The End Report