

RF Exposure Evaluation

For

Celestron Acquisition LLC

SkyPortal WiFi Module

Test Model: 93973

Prepared for	:	Celestron Acquisition LLC
Address	:	2835 Columbia Street, Torrance, CA 90503, USA
Prepared by	:	Guangzhou LCS Compliance Testing Laboratory Ltd.
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Date of receipt of test sample	:	January 19, 2026
Number of tested samples	:	2
Sample No.	:	C260119001-1, C260119001-2
Serial number	:	Prototype
Date of Test	:	January 19, 2026 ~ February 10, 2026
Date of Report	:	February 11, 2026

RF Exposure Evaluation	
Report Reference No.	LCSC01096005ED
Date of Issue	February 11, 2026
Testing Laboratory Name	Guangzhou LCS Compliance Testing Laboratory Ltd.
Address	No.44-1,Qianfeng North Road, Shiqi, Panyu District, Guangzhou, Guangdong, China
Testing Location/ Procedure	Full application of Harmonised standards ☒ Partial application of Harmonised standards ☐ Other standard testing method ☐
Applicant's Name	Celestron Acquisition LLC
Address	2835 Columbia Street, Torrance, CA 90503, USA
Test Specification	
Standard	FCC KDB publication 447498 D01 General RF Exposure Guidance v06 FCC CFR 47 part1 1.1310 FCC CFR 47 part2 2.1091
Test Report Form No.	TRF-4-E-214 A/0
TRF Originator	Guangzhou LCS Compliance Testing Laboratory Ltd.
Master TRF	Dated 2011-03
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EUT Description	SkyPortal WiFi Module
Trade Mark	CELESTRON
Test Model	93973
Ratings	Please Refer to Page 6
Result	Positive

Compiled by:

Supervised by:

Approved by:





Lifeng Le / Administrators

... Justin Zhu/ Technique Director

Gavin Liang/ Manager

RF Exposure Evaluation

Test Report No. : LCSC01096005ED	<u>February 11, 2026</u> Date of issue
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EUT.....	: SkyPortal WiFi Module
Test Model.....	: 93973
Applicant.....	: Celestron Acquisition LLC
Address.....	: 2835 Columbia Street, Torrance, CA 90503, USA
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: ShenZhen XinJunMeng Energy Technology Co. Ltd.
Address.....	: Rooms 201, Building 2, No.27 Longwo 1st Road, Longtian Community, Longtian Subdistrict, Pingshan District, Shenzhen City, Guangdong Province, China.
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Factory.....	: ShenZhen XinJunMeng Energy Technology Co. Ltd.
Address.....	: Rooms 201, Building 2, No.27 Longwo 1st Road, Longtian Community, Longtian Subdistrict, Pingshan District, Shenzhen City, Guangdong Province, China.
Telephone.....	: /
Fax.....	: /

Test Result:	Positive
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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.

Revision History

Report Version	Issue Date	Revision Content	Revised By
000	February 11, 2026	Initial Issue	---

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1. Product Information

EUT	:	SkyPortal WiFi Module
Test Model	:	93973
Rated Voltage	:	DC 12V 2A
Adapter information	:	100-240V 50/60Hz
Hardware Version	:	/
Software Version	:	/
WIFI(2.4G Band)		
Frequency Range	:	2412MHz~2462MHz
Channel Number	:	11 Channels for 20MHz bandwidth(2412~2462MHz) 7 Channels for 40MHz bandwidth(2422~2452MHz)
Channel Spacing	:	5MHz
Modulation Type	:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	Internal Antenna, 2.5dBi(Max.)
WIFI(5.2G Band)		
Frequency Range	:	5180MHz~5240MHz
Channel Number	:	4 channels for 20MHz bandwidth(5180MHz-5240MHz) 2 channels for 40MHz bandwidth(5190MHz~5230MHz)
Modulation Type	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	Internal Antenna, 4.5dBi(Max.)
WIFI(5.8G Band)		
Frequency Range	:	5745MHz~5825MHz
Channel Number	:	5 channels for 20MHz bandwidth(5745MHz~5825MHz) 2 channels for 40MHz bandwidth(5755MHz~5795MHz)
Modulation Type	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	Internal Antenna, 4.5dBi(Max.)
Exposure category	:	General population/uncontrolled environment
EUT Type	:	Production Unit
Device Type	:	Mobile Device

Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.

2. Evaluation Method

Systems operating under the provisions of FCC 47 CFR 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. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

In accordance with KDB447498D01 for Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modelled or measured field strengths or power density, is ≤ 1.0 . The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency. Either the maximum peak or spatially averaged results from measurements or numerical simulations may be used to determine the MPE ratios. Spatial averaging does not apply when MPE is estimated using simple calculations based on far-field plane-wave equivalent conditions. The antenna installation and operating requirements for the host device must meet the minimum test separation distances required by all antennas, in both standalone and simultaneous transmission operations, to satisfy compliance.

3. Limit

3.1 Refer Evaluation Method

[ANSI C95.1-2019](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz

[FCC KDB publication 447498 D01 General 1 RF Exposure Guidance v06](#): Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

[FCC CFR 47 part1 1.1310](#): Radiofrequency radiation exposure limits.

[FCC CFR 47 part2 2.1091](#): Radiofrequency radiation exposure evaluation: mobile devices.

3.2 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/Uncontrolled 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

4. 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

5. Antenna Information

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

Internal/ External Identification	Antenna type and antenna number	Operate frequency band	Maximum antenna gain	Notes
Internal	Internal Antenna	2400MHz ~ 6000MHz	2.4GWIFI: 2.5dBi 5GWIFI: 4.5dBi	WIFI Antenna

6. Conducted Power

[2.4G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11B	1	2412	18.97
	6	2437	19.25
	11	2462	19.16
11G	1	2412	18.85
	6	2437	18.87
	11	2462	18.85
11N20 SISO	1	2412	19.15
	6	2437	19.17
	11	2462	18.94
11N40 SISO	3	2422	19.07
	6	2437	19.18
	9	2452	19.06

[5.2G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11A	36	5180	16.72
	40	5200	17.0
	48	5240	17.72
11N20 SISO	36	5180	16.74
	40	5200	16.96
	48	5240	17.69
11N40 SISO	38	5190	16.24
	46	5230	16.85

[5.8G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11A	149	5745	16.35
	157	5785	15.83
	165	5825	16.8
11N20 SISO	149	5745	16.83
	157	5785	16.67
	165	5825	16.66
11N40 SISO	151	5755	17.6
	159	5795	17.58

7. Manufacturing Tolerance

[2.4G WIFI]			
11B (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	18.0	19.0	19.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11G (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	18.0	18.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	19.0	19.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(Peak)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	19.0	19.0	19.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

[5.2G WIFI]			
11A (AVG)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	16.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	16.0	16.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 38	Channel 46	
Target (dBm)	16.0	16.0	
Tolerance $\pm$ (dB)	1.0	1.0	

[5.8G WIFI]			
11A (AVG)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	16.0	15.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	16.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 151	Channel 159	
Target (dBm)	17.0	17.0	
Tolerance $\pm$ (dB)	1.0	1.0	

8. Measurement Results

8.1 Standalone MPE Evaluation

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 refer to antenna information, the RF power density can be obtained.

[2.4G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11b	20.0	100.0000	2.5	1.7783	0.0354	1.0000
IEEE 802.11g	19.0	79.4328	2.5	1.7783	0.0281	1.0000
IEEE 802.11n HT20	20.0	100.0000	2.5	1.7783	0.0354	1.0000
IEEE 802.11n HT40	20.0	100.0000	2.5	1.7783	0.0354	1.0000

[5.2G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	18.0	63.0957	4.5	2.8184	0.0354	1.0000
IEEE 802.11n HT20	18.0	63.0957	4.5	2.8184	0.0354	1.0000
IEEE 802.11n HT40	17.0	50.1187	4.5	2.8184	0.0281	1.0000

[5.8G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	17.0	50.1187	4.5	2.8184	0.0281	1.0000
IEEE 802.11n HT20	17.0	50.1187	4.5	2.8184	0.0281	1.0000
IEEE 802.11n HT40	18.0	63.0957	4.5	2.8184	0.0354	1.0000

Remark:

1. Output power including tune-up tolerance;
2. Output power was adjusted to duty cycle at 100% if measured duty cycle less than 98%;
3. MPE evaluate distance is 20cm from user manual provide by manufacturer;
4. 2.4GWIFI and 5GWIFI cannot transmit simultaneously.

9. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

10. Description of Test Facility

CNAS Registration Number is L11555
 A2LA Certificate Number: 5099.01
 FCC Designation Number is CN1379
 Test Firm Registration Number: 729882

11.Measurement Uncertainty

2.4GWLAN/5.2G WLAN/5.8G WLAN:

Test Item	Frequency Range	Uncertainty	Note
Output power	: 1GHz-40GHz	±0.57dB	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

-----THE END OF REPORT-----