



## FCC RF EXPOSURE REPORT

## CERTIFICATION TEST REPORT

*For*

**Air Quality Monitor**

**MODEL NUMBER: P3A7EN**

**FCC ID: 2AYXQ-7327**

**REPORT NUMBER: 4789926804-4**

**ISSUE DATE: August 30, 2021**

*Prepared for*

**Banalsite Cadmium LLC 1452  
HUGHES ROAD GRAPEVINE, Texas, United States**

*Prepared by*

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	08/30/2021	Initial Issue	

## TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS .....	4
2. TEST METHODOLOGY .....	5
3. FACILITIES AND ACCREDITATION .....	5
4. REQUIREMENT .....	6

## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Banalsite Cadmium LLC 1452  
Address: HUGHES ROAD GRAPEVINE, Texas, United States

### Manufacturer Information

Company Name: LEEDARSON LIGHTING CO., LTD.  
Address: XINGDA RD XINGTAI INDUSTRIAL ZONE CHANGTAI COUNTY  
ZHANGZHOU FUJIAN 363900 CN

### EUT Information

EUT Name: Air Quality Monitor  
Model: P3A7EN  
Sample Received Date: August 15, 2021  
Sample Status: Normal  
Sample ID: 3904966  
Date of Tested: August 15 ~ 27, 2021

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§2.1091	PASS

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules</p> <p><b>ISED (Company No.: 21320)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.</p> <p>Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p>
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Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.

## 4. REQUIREMENT

### LIMIT AND CALCULATION 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.

Limits for General Population/Uncontrolled Exposure

### RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

### CALCULATION METHOD

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

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

**CALCULATED RESULTS**

Worst Case					
Mode	Max. tune up Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
BLE	3.18	1.8	0.00063	1.0	Complies

Worst Case					
Mode	Max. tune up Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
BT	5.93	1.8	0.00118	1.0	Complies

Worst Case					
Mode	Max. tune up Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
WIFI 2.4G	18.06	1.8	0.01926	1.0	Complies

## Note:

1. The EUT cannot support simultaneous emission.
2. The minimum separation distance of the device is greater than 20 cm.
3. Calculate by WORST-CASE mode.

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**END OF REPORT**