



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx NEP 24.0008X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2024-02-05

Applicant: **Red Sky Lighting LLC**
Room 516, No.8 Hengfei Road, Nanjing Economic and Technological Development Zone, Nanjing, Jiangsu, China
Nanjing 210046
China

Equipment: **LED Explosion Proof Luminaire**

Optional accessory:

Type of Protection: **Ex ec nC nR, Ex tb**

Marking: Ex ec nC nR IIC T4 Gc ;Ex tb IIIC T110°C Db IP66 (for P_N: 65W and 75W);
Ex ec nC nR IIC T6 Gc ;Ex tb IIIC T85°C Db IP66 (for P_N: 25W and 45W);
-40°C≤Tamb≤+55°C (Non-emergency);
0°C≤Tamb≤+50°C (Emergency)

Approved for issue on behalf of the IECEx
Certification Body:

Guo Aihua

Position:

General Manager

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

**Shanghai Inspection and Testing Institute of Instruments
and Automatic Systems Co., Ltd. (SITI/IAS)/
National Supervision and Inspection Center for Explosion
Protection and Safety of Instrumentation (NEPSI)
103 Cao Bao Road
Shanghai 200233
China**



SITI/IAS
Worldwide Access



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Manufacturer: **Red Sky Lighting LLC**
Room 516, No.8 Hengfei Road, Nanjing Economic and Technological Development Zone, Nanjing, Jiangsu, China
Nanjing 210046
China

Manufacturing locations: **Red Sky Lighting LLC**
Room 516, No.8 Hengfei Road,
Nanjing Economic and Technological
Development Zone, Nanjing, Jiangsu,
China
Nanjing 210046
China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

[IEC 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[CN/NEP/ExTR23.0028/00](#)

Quality Assessment Report:

[DE/TPS/QAR17.0003/08](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:



Refer to Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The equipment shall be installed according to operating instructions and IEC 60079-14: latest version.
2. An external grounding or equipotential connection is required, the cross-sectional area of grounding shall be 4mm² at least.
3. Potential electrostatic charging hazard is existed. Clean the surface by wet cloth.
4. The cell IFR26650N3000 type voltage shall be used for the RND-XX-100-240-EM series emergency LED luminaires.

Annex:

[Annex to IECEx NEP 24.0008X_1.pdf](#)

Shanghai Inspection and Testing Institute of Instruments and Automatic Systems Co., Ltd. (SITIIS) National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI) 103 Cao Bao Road, Shanghai 200233, China	 
Annex to IECEx Certificate of Conformity of IECEx NEP 24.0008X	

General product information:

The model RND series of luminaires are suitable for use in Zone 2 and Zone 21 explosive atmospheres. These luminaires consist of interconnecting “nR/tb” chambers: one is the wire cavity (LED driver cavity) for wiring connection, the other one is the LED array chamber(light cavity). And there is an emergency junction chamber for installing emergency driver for emergency type (EM series). LED drivers are evaluated as Ex nC sealed device, the connector OPENWISE 206 series and splicing connector WAGO 221 series are evaluated as Ex ec. Also some models may equip bracket. The light-transmitting cover is made of transparent PC materials and there is glass cover it. Two structures of glass can be used, one structure is plain glass without guard. The other structure is curved glass with guard having individual openings from 625 mm² to 2500mm². The entry for wire through cable gland with Ex separately certified but not provided by the manufacturer. For the DC LED luminaire RND-XX-24 series, one PCB board with the diode is installed in the power chamber to prevent reverse connection of power supply.

Rating



$U_N=100$ to 240Vac; or $U_N=24$ Vdc

$P_N=25$ W;45W;65W;75W

$F_N=50/60$ Hz

The relationship between Ex marking and models is as follows:

Series	Model	Ex Marking	Ambient temperature
RND-XX-100-240 series (AC LED luminaire)	RND-75-100-240 and RND-65-100-240	Ex ec nC nR IIC T4 Gc; Ex tb IIIC T110°C Db	-40°C ≤ Tamb ≤ +55°C
	RND-45-100-240 and RND-25-100-240	Ex ec nC nR IIC T6 Gc; Ex tb IIIC T85°C Db	
RND-XX-24 series (DC LED luminaire)	RND-65-24	Ex ec nC nR IIC T4 Gc; Ex tb IIIC T110°C Db	-40°C ≤ Tamb ≤ +55°C
	RND-45-24 and RND-25-24	Ex ec nC nR IIC T6 Gc; Ex tb IIIC T85°C Db	
RND-XX-100-240-EM series (AC LED luminaire)	RND-75-100-240-EM and RND-65-100-240-EM	Ex ec nC nR IIC T4 Gc; Ex tb IIIC T110°C Db	0°C ≤ Tamb ≤ +50°C
	RND-45-100-240-EM and RND-25-100-240-EM	Ex ec nC nR IIC T6 Gc; Ex tb IIIC T85°C Db	

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The designation is shown as follows:

Models:

RND - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9

- 2= Wattage (25=25W, 45=45W, 65=65W , 75=75W)
- 3= Voltage (100-240=100-240Vac)
- 4= CCT (57=5700K, 5K=5000K, 4K=4000K, 3K=3000K)
- 5= Beam (110=110°,180=> 180°,60=60°)
- 6= Rating (X2=Zone2,21)
- 7= Lens (CG=Clear Glass, DG=Diffuse glass, DLG=Diffuse Drop Lens Glass)
- 8= Color (GRY="gray"(Standard), BLK="black", WHT="white",BRZ ="bronze")
- 9= Mounting (PDCG=Pendant & Ceiling, YKE=Yoke)

Models:

RND - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9

- 2= Wattage (25=25W, 45=45W, 65=65W)
- 3= Voltage (24=24Vdc)
- 4= CCT (57=5700K, 5K=5000K, 4K=4000K, 3K=3000K)
- 5= Beam (110=110°,180=> 180°,60=60°)
- 6= Rating (X2=Zone2,21)
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- 9= Mounting (PDCG=Pendant & Ceiling, YKE=Yoke)

Models:

RND - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - EM

- 2= Wattage (25=25W, 45=45W, 65=65W, 75=75W)
- 3= Voltage (100-240=100-240Vac)
- 4= CCT (57=5700K, 5K=5000K, 4K=4000K, 3K=3000K)
- 5= Beam (110=110°,180=> 180°,60=60°)
- 6= Rating (X2=Zone2,21)
- 7= Lens (CG=Clear Glass, DG=Diffuse glass, DLG=Diffuse Drop Lens Glass)
- 8= Color (GRY="gray"(Standard), BLK="black", WHT="white",BRZ ="bronze")
- 9= Mounting (PDCG=Pendant & Ceiling, YKE=Yoke)
- EM= Battery (BLANK=Non Emergency,EM=12W 90mins)