

100W CALADAN | LED EXPLOSION PROOF LIGHT



PRODUCT DESCRIPTION

The New CALADAN Series is back with a slim new design but keeps all toughness of an explosion proof light. This New model comes with all necessary Class 1 division II certifications!

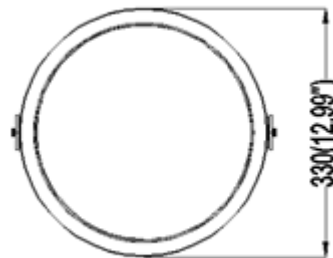
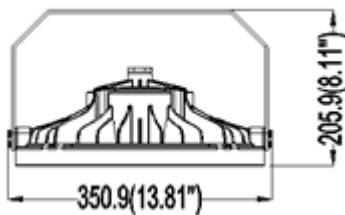


DLC #: RGL-CALADAN-100W

PRODUCT FEATURES & CERTIFICATIONS

- UL cUL certificate.
- Input voltage 120-277VAC.
- No UV or IR in the beam.
- Easy to install and operate.
- Energy saving, long lifespan.
- Light is soft and uniform, safe to eyes.
- Instant start, NO flickering, NO humming.
- Green and eco-friendly without mercury.
- CID2 Groups A,B,C,D.T4/T4A
- UL 844.
- UL 1598.
- UL 8750.
- CSA C22.2 No.137.0.
- CSA C22.2 No.250.0.
- CSA C22.2 No.250.13.

PRODUCT DIMENSIONS



Rugged Grade Lighting
Industrial Grade Solutions



LEGENDARY USA SUPPORT



US based
phone and online
customer support



888-953-2476
sales@ruggedgrade.com



PRODUCT TECHNICAL SPECIFICATIONS

OPTICAL	Input Power (Tolerance : ±10%)	100W			
	Color Temperature	3000K-6500K			
	Cover	Clear Glass	Clear Glass+ Lens	Clear Glass+Wire Gaurd	Clear Striped Spherical Glass
	Lumen (Tolerance : -10%)	15000LM	14500LM	12800LM	14100LM
	Efficacy (Tolerance : -3%)	150LM/W	145LM/W	128LM/W	141LM/W
	CRI	>80			
	Color Consistency	< 7 Steps (or < 7 SDCM)			
	UGR (Glare Rating)	< 28 (X=4H, Y=8H; S/H=1; Reflectances: 70%/50%/20%)			
	Diffuser Type	PC Lens			
	Beam Angle (50%) (Tolerance :	110 Degree			
ELECTRICAL	Input Voltage and Frequency	120-277VAC, 50/60Hz			
	PF (Tolerance : -3%)	≥0.9			
	THD (Tolerance : +5%)	≤20%			
	Flicker Percent	< 5%			
	Driver Brand	Rugged Grade Lighting			
	Driver Model	Rugged Grade Lighting Driver			
	Driver Surge protection	L/N-PE: 10kV, L-N: 10kV			
	LED Brand	Lumileds			
	LED Type	SMD2835			
	MATERIALS	LED QTY	330PCS		
Housing		Die-cast aluminum			
Housing Color		Grey, or Customized			
Waterproof Rating		WET (IP66)			
Operating Temperature		-40°C TO 55°C			
OTHERS	Operating Humidity	10% - 90% RH			
	Storage Humidity	10% - 95% RH			
	Warranty	5 years warranty with 24/7 operating hours Luminaire lifetime at 25°C.			

PRODUCT MOUNTS & ACCESSORIES



Clear glass



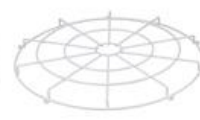
Clear striped spherical glass



Bracket



Wire guard



Flat wire guard



PRODUCT IMAGES & ACTUAL INSTALLATIONS

1. Suitable for gas station, petroleum and chemical industries, coal mine, military, airport, warehouse, marine etc.
2. Zone1 & Zone2 gaseous environment, and Zone21 & Zone22 dust environment.
3. Class I Division 2 Group A, B, C, D



Chemical Factory



Offshore Oil Mining



Military Ship



Army Base



Gas Station



Petrol Process Factory



Traning Camp



Navy Port



PHOTOMETRICS

Luminaire Property

Luminaire Manufacturer:

Voltage: 121.0 V

Power: 102.90 W

Current: 0.853 A

Power Factor: 0.997

Photometric Results

CIE Class: Direct

Measurement Flux: 14155 lm

Downward Ratio: 96%

Horizontal Diffuse Angle(10%,50%): H166.1,H117.9

Vertical Diffuse Angle(10%,50%): V166,V117

Luminaire Efficacy Rating (LER): 137.61

Max. Intensity: 4471.21 cd

S/MH(C0/C180): 1.31

Total Rated Lamp Lumens: 14155.0 lm

Efficiency: 100%

Upward Ratio: 4%

Central Intensity: 4291.51 cd

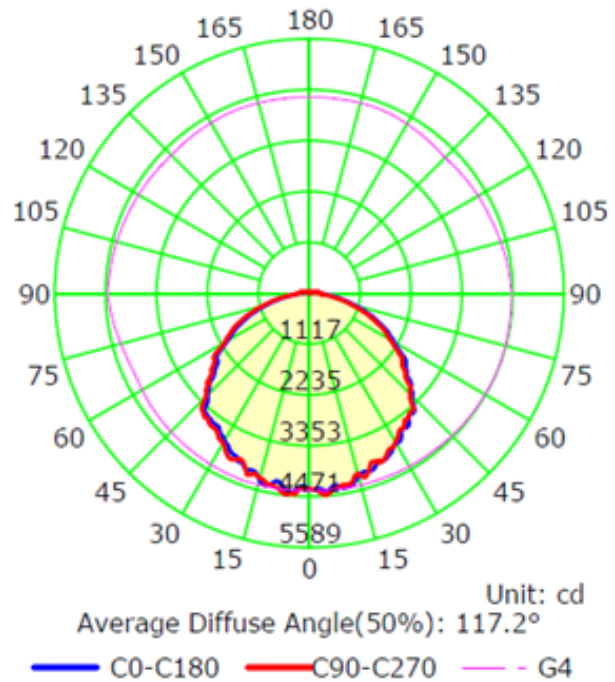
Pos of Max. Intensity: H67.5 V4

S/MH(C90/C270): 1.30

Picture Of Luminaire



Luminous Intensity Distribution Curve



DLC PRODUCT SPEC

Product ID: S-6GSYVX

X



RGL-CALADAN-100WBSSD1-abc50

Manufacturer: RuggedGrade
Brand: RUGGEDGRADE

PRODUCT OVERVIEW

Model Number	RGL-CALADAN-100WBSSD1-abc50
Classification	Standard
Primary Use	Specialty: Hazardous Environment High Bay
Reported Input Wattage	104.3 W
Reported Light Output	14405 lm
Reported CCT	5000 K
Reported CRI (Ra)	81
Product ID	S-6GSYVX
DLC Family Code	B1YR08
Listing Status	Listed
Date Qualified	2025-08-19

PRODUCT INFORMATION

Qualified Product List	Solid State Lighting
Technical Requirements Version	5.1
Product ID	S-6GSYVX
Manufacturer	RuggedGrade
Brand	RUGGEDGRADE
Model Number	RGL-CALADAN-100WBSSD1-abc50
Parent	No
Classification	Standard

PRODUCT CATEGORIZATION

[VIEW DETAILS](#)

CONTROL FEATURES

[VIEW DETAILS](#)

REPORTED PHOTOMETRIC PERFORMANCE

Reported Light Output	14405 lm
Reported Efficacy (AC)	138.14 lm/W
Reported CCT	5000 K
Reported CRI (Ra)	81
Reported R9	-1
Reported IES Rf	84
Reported IES Rg	96
Reported IES Rcs,h1	-12

REPORTED ELECTRICAL PERFORMANCE

Reported Input Wattage	104.3 W
Reported Total Harmonic Distortion	15 %
Reported Power Factor	0.9
Reported Default Input Wattage	104.3 W
Voltage Range	120-277 V



PRODUCT PACKAGING

		clear glass + wire guard	clear striped spherical glass + wire guard
Lamps Net Weight		6.2kg	6.8kg
	Carton Size	400*400*218mm	400*400*285mm
	Qty/ Carton	1 PCS	
	Weight/Carton	7.1kg	7.9kg

*Tolerance of Carton Size: ± 15 MM, Tolerance of Weight: $\pm 10\%$.



PRODUCT WARNINGS

- ⚠ Please turn off power before install or change assembly parts.
- ⚠ The input voltage and lamps should be matched, after connecting the power line.
- ⚠ Please make sure the wiring section is insulated.
- ⚠ Professionals must install and disassemble the lamps.
- ⚠ Surge is the number 1 cause of LED light failure. Outdoor lights must have surge at fixture, pole, and breaker.
- ⚠ Surge is the number 1 cause of LED light failure. Indoor lights must have surge at fixture and breaker.

PRODUCT TROUBLESHOOTING

Issue	Check points
Light Flickers	Check all wiring for disconnections, shorts and burnt wiring and connections. Confirm steady input voltage to the light fixture, fluctuating input voltage will harm the LED driver and can lead to premature failure. Lights with photocells can have photocell tag from ambient light or light reflecting at the sensor. Simply cover the photocell completely and see if flickering continues while the photocell is covered. Call Tech Support for help if none of the above solves the issue.
Light does not work at all.	Check all wiring for disconnections, shorts and burnt wiring and connections. Confirm steady input voltage to the light fixture, fluctuating input voltage will harm the LED driver and can lead to premature failure. If input voltage is not in the voltage range of the fixture, you will need to find the source of your input voltage issue. Call Tech Support for help if none of the above solves the issue.

For more technical information, install questions, troubleshooting help or warranty claims, we have a dedicated US Tech and Customer Support Team to help solve any issues you have and can be reached by email or phone. If you need help with any of our products, we are here for you so that you are never in the dark!

BETTER LIGHTS. BETTER SUPPORT.

