

# HAZARDOUS LOCATION LIGHTING BASICS

## Atmosphere Groups

## Temperature Classification

Substance	Hazard Class	Division Groups	Zone Groups	Max. Surface Temperatures	NEC® 500 CEC®	NEC® 500/IEC-Group II
Acetylene	Class I Flammable Gases	Group A	IIC	450(842)	T1	T1
Hydrogen		Group B	IIC	300(572)	T2	
Ethylene		Group C	IIB	280(536)	T2A	T2
Propane		Group D	IIA	260(500)	T2B	
Methane		Group D	IIA <sup>2</sup>	230(446)	T2C	
Combustible Metal Dusts	Class II Combustible Dusts	Group E <sup>1</sup>	IIIC <sup>3</sup>	215(419)	T2D	T3
Combustible Carbonaceous Dust		Group F	IIIB <sup>3</sup>	200(392)	T3	
Combustible Dusts not in Group E or F (Flour, Grain, Wood, Plastics, Chemicals)		Group G	IIIB <sup>3</sup>	180(256)	T3A	
Combustible Fibers and Flyings		Class III Fibers and Flyings	Not Applicable	IIIA <sup>3</sup>	165(329)	
				160(320)	T3C	
				135(275)	T4	T4
				120(248)	T4A	
				100(212)	T5	T5
				85(185)	T6	T6

Note 1: Group E is applicable to Class II, Division 1 only.

Note 2: Methane is a Group IIA Gas for non-mining applications.

Note 3: Group IIIA, IIIB and IIIC have not been adopted by the Canadian Electrical Code.

## Classification of Divisions and Zones

Hazard Level	Division Scheme	Zone Scheme	Definitions
Continuous Hazard	Division 1	Zone 0 / Zone 20	A place in which an explosive atmosphere is continually present
Intermittent Hazard		Zone 1 / Zone 21	A place in which an explosive atmosphere is likely to occur in normal operation
Hazard Under Abnormal Conditions	Division 2	Zone 2 / Zone 22	A place in which an explosive atmosphere is not likely to occur in normal operation, but may occur for short periods

## IP Codes

1st No.	Solid Objects
0	No protection
1	Objects greater than 50mm
2	Objects greater than 12.5mm
3	Objects greater than 2.5mm
4	Objects greater than 1mm
5	Dust protected
6	Dust proof

2nd No.	Liquids
0	No protection
1	Vertically dripping
2	Dripping up to 15°
3	Limited spraying
4	Splashing from all directions
5	Hosing jets from all directions
6	Strong hosing jets from all directions
7	Temporary immersion
8	Continuous immersion
9	Steam-jet cleaning

## IK Ratings

IK Code	Level of Protection Achieved
IK00	Not protected
IK01	Protected against 0.14 joules impact
IK02	Protected against 0.2 joules impact
IK03	Protected against 0.35 joules impact
IK04	Protected against 0.5 joules impact
IK05	Protected against 0.7 joules impact
IK06	Protected against 1 joules impact
IK07	Protected against 2 joules impact
IK08	Protected against 5 joules impact
IK09	Protected against 10 joules impact
IK10	Protected against 20 joules impact



**RED SKY**  
SERIOUSLY SAFE LIGHTS™



## HARSH & HAZARDOUS (ATEX & IECEx & UKEX)

### BLOCK MAX SERIES



**ATEX & UKEX Standard**  
 II 2G Ex eb mb IIC T5/T4 Gb  
 II 2D Ex tb IIIC T85°C Db  
**IECEx Standard**  
 Ex eb mb IIC T5/T4 Gb  
 Ex tb IIIC T85°C Db  
**UKCA EMC/LVD**  
 Zone 1&2  
 Zone 21&22  
 IP66/67  
 IK08  
 IEC60068-2-6 3g



**Wattage:** 40W(EM)/90W(EM)/115W/145W/180W  
**Lumens (Lm):** 7,162/15,523/20,741/25,800/31,164  
**Lumens (EM):** 5,020Lm@90mins/2,581Lm@180mins  
**Warranty:** Driver: 5 years, Battery: 1 Year

### BLOCK SERIES X1



**ATEX Standard**  
 II 2G Ex db IIB T5 Gb  
 II 2D Ex tb IIIC (T95°C Max) Db, IP66  
**CE EMC/LVD**  
 Zone 1&2  
 Zone 21&22  
 IP66  
 IK08



**Wattage:** 20W/40W/60W/80W/100W/120W/150W  
**Lumens (Lm):** 2,399/4,260/5,944/8,815/10,733/15,807/18,863  
**Warranty:** 5 Years

### BLOCK SERIES C1



**IECEx Standard**  
 Ex db IIB T6 Gb  
 Ex tb IIIC T85°C Db  
**UKEX**  
 II 2G Ex db IIB T6 Gb  
 II 2D Ex tb IIIC T85°C Db  
**CE EMC/LVD**  
 Zone 1&2  
 Zone 21&22  
 IP66/67  
 IK09



**Wattage:** 80W/100W/150W  
**Lumens (Lm):** 10,288/12,274/18,646  
**Warranty:** 5 Years

### LINEAR LOW PROFILE SERIES



(Battery option available)

**ATEX & UKEX Standard**  
 II 2G Ex db eb mb IIC T6/T5 Gb  
 II 2D Ex tb IIIC T80°C Db  
**IECEx Standard**  
 Ex db eb mb IIC T6/T5 Gb  
 Ex tb IIIC T80°C Db  
**CE EMC/LVD**  
**ROHS**  
**UKCA (Pending)**  
 Zone 1,21  
 IP66  
 IK10

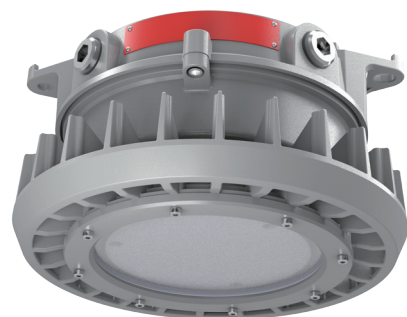


**Wattage:** 20W/40W/50W/60W/80W/100W  
**Lumens (Lm):** 2,208/4,164/6,067/6,448/7,943/9,399  
**Warranty:** Fixture: 5 Years. Battery: 1 Year

### ROUND SERIES X2 AC & EM



**ATEX & UKEX Standard**  
 II 3G Ex ec nC nR IIC T4 Gc;  
 II 2D Ex tb IIIC T110°C Db (65W/75W)  
 II 3G Ex ec nC nR IIC T6 Gc;  
 II 2D Ex tb IIIC T85°C Db (25W/45W)  
**IECEx Standard**  
 Ex ec nC nR IIC T4 Gc;  
 Ex tb IIIC T110°C Db (65W/75W)  
 Ex ec nC nR IIC T6 Gc;  
 Ex tb IIIC T85°C Db (25W/45W)  
 Zone 2,21  
 IP66  
 IK08

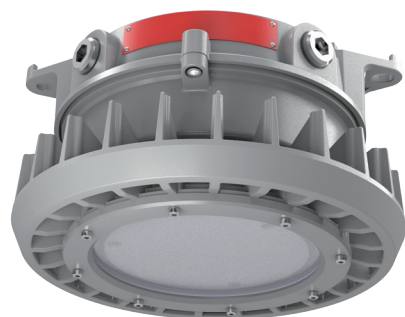


**Wattage:** 25W/45W/65W/75W  
**Lumens (Lm):** 4,036/7,129/10,405/11,758  
**Lumens (EM):** 1,800  
**Warranty:** Driver: 5 years, Battery: 1 Year

### ROUND SERIES X2 DC



**ATEX & UKEX Standard**  
 II 3G Ex ec nC nR IIC T4 Gc;  
 II 2D Ex tb IIIC T110°C Db (65W)  
 II 3G Ex ec nC nR IIC T6 Gc;  
 II 2D Ex tb IIIC T85°C Db (25W/45W)  
**IECEx Standard**  
 Ex ec nC nR IIC T4 Gc;  
 Ex tb IIIC T110°C Db (65W)  
 Ex ec nC nR IIC T6 Gc;  
 Ex tb IIIC T85°C Db (25W/45W)  
 Zone 2,21  
 IP66  
 IK08



**Wattage:** 25W/45W/65W  
**Lumens (Lm):** 4,096/7,067/10,209  
**Warranty:** 5 Years

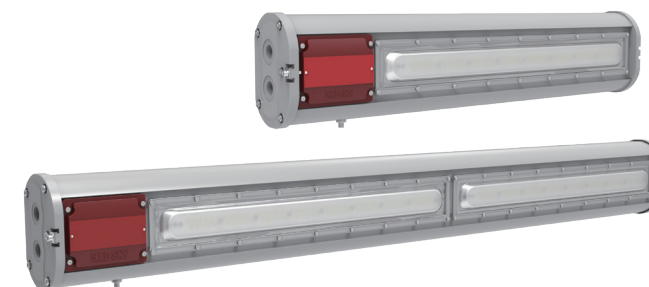
## HARSH (CE & UKCA)

### LINEAR HARSH SERIES

(Battery option available)



**CE EMC/LVD**  
**UKCA**  
**ROHS**  
 IP66  
 IK08



**Wattage:** 25W/50W/75W/100W  
**Lumens (Lm):** 4,089/7,453/11,313/10,294  
**Warranty:** Fixture: 5 Years. Battery: 1 Year

### CRANE MASTER SERIES



**CE EMC/LVD**  
**UKCA**  
**ROHS**  
 IP67  
 IK08  
 IEC60068-2-6 5g



**Wattage:** 150W/300W/420W/560W  
**Lumens (Lm):** 20,439/42,425/58,852/79,230  
**Warranty:** 5 Years

### SCAN FOR LATEST PRODUCT INFO



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