

# Lighting: Fluorescent & LED Lighting Fixture, DFP-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



## Application

The DFP-S series can be used all over the world and are suited for lighting applications in hazardous areas, e.g. onshore, offshore platforms or refineries. The different light families allow their optimum use in various environments.

The DFP-S series consist of a glass tube with two end caps. They are for installation of both single and double T8 and T5 bi-pin fluorescent, LED tube or LED PCB. The end cap and threaded housing for ballast and terminals connection.

## Specification

- Body material : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (grey)
- Glass tube : Borosilicate glass (4J impact)
- Reflector : Sheet steel with polyester powder coated, RAL 9016 (white)
- Protective guard : Stainless steel, SUS 304
- Sealing gasket : Silicone

## Electrical for Emergency unit

- Operation : Maintained mode
- Battery : Ni-MH, 7.2V. 2.25Ah.
- Recharge time : 24-hours from fully discharge
- Emergency duration : 120Min. (2-Hours)

## Option

- Body : Offshore painting (Acrylic polyurethane coating)
- Protective guard : Stainless steel, SUS 316
- Screws : Stainless steel, SUS 316

## Technical Data

<b>Hazardous Area</b>	<b>Gas</b>	<b>Dust</b>
<b>Zones</b>	1 & 2	21 & 22
<b>Equipment Group/Category</b>	Ex II 2G	Ex II 2D
<b>Symbol of Protection</b>	Ex db IIC T6 Gb	Ex tb IIIC T85°C Db IP66
<b>Certificate</b>	TÜV CY 17 ATEX 0205887 X	
<b>Conformity to Standards</b>	EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-31:2014	
<b>Ambient Temperature</b>	-20°C to +55°C	
	0°C to +55°C (with emergency battery)	
<b>Index of Protection</b>	IP66	
<b>Entries</b>	2- M20x1.5, 2- M25x1.5 (1-stopping plug) or 2- Ø1/2" NPT, 2- Ø3/4" NPT (1-stopping plug)	
<b>Mounting</b>	Ceiling, Pendant, Bracket, Stanchion or Pole mount	
<b>Connection</b>	L, N and E ; for 1-4mm. <sup>2</sup> cable	
<b>Rated Voltage</b>	110-240V.ac 50/60Hz. (P.F. ≥ 0.98)	



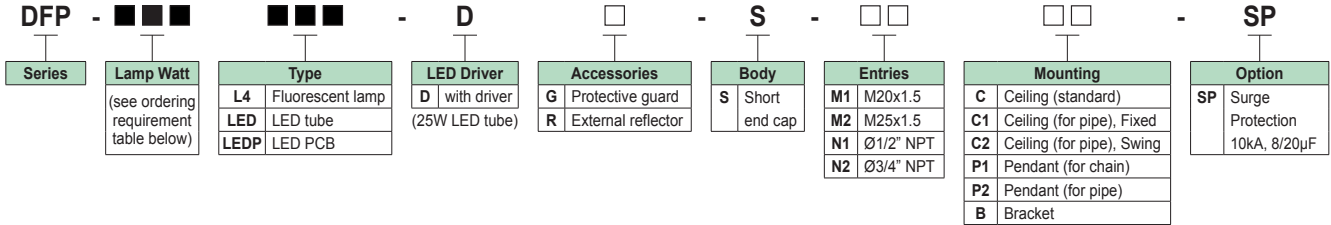


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Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

## Catalogue Number Logic (Normal Light)



## Ordering Requirements and Dimension

Cat. No.	Lamp Watt	Voltage	Ballast or Driver	Temp. Class (for zone 1 & 2)		Max. Surface Temp.* (for zone 21 & 22)		Volume (dm <sup>3</sup> )	Dimension in mm.		Approx. Weight (kgs.)										
				Ta 40°C	Ta 55°C	Ta 40°C	Ta 55°C		a	b											
<b>T8 Fluorescent Lamp</b>																					
DFP-118L4	- □ - S - □□ - □	1x 18W.	220-240V.ac 50/60Hz.	Electronic	T6	T6	T85°C	T85°C	3.95	750	645	6.80									
DFP-218L4	- □ - S - □□ - □	2x 18W.										6.95									
DFP-132L4	- □ - S - □□ - □	1x 32W.										10.30									
DFP-232L4	- □ - S - □□ - □	2x 32W.							10.60												
DFP-136L4	- □ - S - □□ - □	1x 36W.							7.02	1365	1258	10.30									
DFP-236L4	- □ - S - □□ - □	2x 36W.										10.60									
<b>T5 Fluorescent Lamp</b>																					
DFP-114L4	- □ - S - □□ - □	1x 14W.	220-240V.ac 50/60Hz.	Electronic	T6	T6	T85°C	T85°C	3.95	750	645	6.80									
DFP-214L4	- □ - S - □□ - □	2x 14W.										6.95									
DFP-128L4	- □ - S - □□ - □	1x 28W.										10.30									
DFP-228L4	- □ - S - □□ - □	2x 28W.							10.60												
<b>LED Tube</b>																					
DFP-105LED	- □ - S - □□ - □	1x 5W.	110-240V.ac 50/60Hz.	-	T6	T6	T85°C	T85°C	3.95	750	645	4.80									
DFP-205LED	- □ - S - □□ - □	2x 5W.										5.00									
DFP-106LED	- □ - S - □□ - □	1x 6W.										4.80									
DFP-206LED	- □ - S - □□ - □	2x 6W.										5.00									
DFP-108LED	- □ - S - □□ - □	1x 8W.										4.80									
DFP-208LED	- □ - S - □□ - □	2x 8W.										5.00									
DFP-109LED	- □ - S - □□ - □	1x 9W.										4.80									
DFP-209LED	- □ - S - □□ - □	2x 9W.										5.00									
DFP-114LED	- □ - S - □□ - □	1x 14W.										110-240V.ac 50/60Hz.	-	T6	T6	T85°C	T85°C	7.02	1365	1258	9.30
DFP-214LED	- □ - S - □□ - □	2x 14W.																			9.60
DFP-115LED	- □ - S - □□ - □	1x 15W.	9.30																		
DFP-215LED	- □ - S - □□ - □	2x 15W.	9.60																		
DFP-116LED	- □ - S - □□ - □	1x 16W.	9.30																		
DFP-216LED	- □ - S - □□ - □	2x 16W.	9.60																		
DFP-118LED	- □ - S - □□ - □	1x 18W.	9.30																		
DFP-218LED	- □ - S - □□ - □	2x 18W.	9.60																		
DFP-120LED	- □ - S - □□ - □	1x 20W.	9.30																		
DFP-220LED	- □ - S - □□ - □	2x 20W.	9.60																		
DFP-122LED	- □ - S - □□ - □	1x 22W.	9.30																		
DFP-222LED	- □ - S - □□ - □	2x 22W.	9.60																		
DFP-125LED	- D □ - S - □□ - □	1x 25W.	110-240V.ac 50/60Hz.	LED Driver	T6	T6	T85°C	T85°C	7.02	1365	1258	10.60									
DFP-225LED	- D □ - S - □□ - □	2x 25W.										11.00									
<b>LED PCB</b>																					
DFP-25LEDP	- D □ - S - □□ - □	25W.	110-240V.ac 50/60Hz.	LED Driver	T6	T6	T85°C	T85°C	3.95	750	645	5.50									
DFP-30LEDP	- D □ - S - □□ - □	30W.																			
DFP-40LEDP	- D □ - S - □□ - □	40W.																			
DFP-50LEDP	- D □ - S - □□ - □	50W.																			
DFP-60LEDP	- D □ - S - □□ - □	60W.																			
DFP-60LEDP1	- D □ - S - □□ - □	60W.																			
DFP-75LEDP	- D □ - S - □□ - □	75W.																			
DFP-90LEDP	- D □ - S - □□ - □	90W.																			
									7.02	1365	1258	11.00									

Lighting source; cool white (6500K) are standard and/or warm white (3000K), please specify.

Remark \*: The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.

# Lighting: Fluorescent & LED Lighting Fixture, DFP-S Series (Short end cap)

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



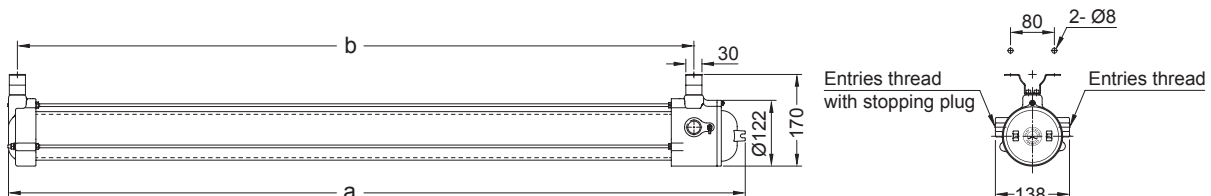
## Catalogue Number Logic (Emergency Light)

<b>DFP</b> - ■■■■ ■■■■ - <b>D</b> □ - <b>S</b> - □□ □□ - <b>SP</b>	<i>under preparation to supplement</i>										
<b>Series</b>	<b>Lamp Watt</b> (see ordering requirement table below)	<b>Type</b> LED LED tube LEDP LED PCB	<b>LED Driver</b> D with driver	<b>Accessories</b> G Protective guard R External reflector E1 Emergency power unit (1-Lamp backup) E2 Emergency power unit (2-Lamps backup)	<b>Body</b> S Short end cap	<b>Entries</b> M1 M20x1.5 M2 M25x1.5 N1 Ø1/2" NPT N2 Ø3/4" NPT	<b>Mounting</b> C Ceiling (standard) C1 Ceiling (for pipe), Fixed C2 Ceiling (for pipe), Swing P1 Pendant (for chain) P2 Pendant (for pipe) B Bracket	<b>SP</b> Surge Protection 10kA, 8/20µF			

## Ordering Requirements and Dimension

Cat. No.	Lamp Watt	Voltage	Driver	Temp. Class (for zone 1 & 2)		Max. Surface Temp.* (for zone 21 & 22)		Volume (dm <sup>3</sup> )	Dimension in mm.		Approx. Weight (kgs.)
				Ta 40°C	Ta 55°C	Ta 40°C	Ta 55°C		a	b	
<b>LED Tube</b>											
DFP-105LED -D □ E1-S- □ - □	1x 5W.	110-240V.ac	LED Driver	T6	T6	T85°C	T85°C	3.95	750	645	4.84
DFP-205LED -D □ E1-S- □ - □	2x 5W.	50/60Hz.									5.04
DFP-106LED -D □ E1-S- □ - □	1x 6W.										4.84
DFP-206LED -D □ E1-S- □ - □	2x 6W.										5.04
DFP-108LED -D □ E1-S- □ - □	1x 8W.										4.84
DFP-208LED -D □ E1-S- □ - □	2x 8W.										5.04
DFP-109LED -D □ E1-S- □ - □	1x 9W.										4.84
DFP-209LED -D □ E1-S- □ - □	2x 9W.										5.04
DFP-114LED -D □ E1-S- □ - □	1x 14W.	110-240V.ac	LED Driver	T6	T6	T85°C	T85°C	7.02	1365	1258	9.34
DFP-214LED -D □ E1-S- □ - □	2x 14W.	50/60Hz.									9.64
DFP-115LED -D □ E1-S- □ - □	1x 15W.										9.34
DFP-215LED -D □ E1-S- □ - □	2x 15W.										9.64
DFP-116LED -D □ E1-S- □ - □	1x 16W.										9.34
DFP-216LED -D □ E1-S- □ - □	2x 16W.										9.64
DFP-118LED -D □ E1-S- □ - □	1x 18W.										9.34
DFP-218LED -D □ E1-S- □ - □	2x 18W.										9.64
DFP-120LED -D □ E1-S- □ - □	1x 20W.										9.34
DFP-220LED -D □ E1-S- □ - □	2x 20W.										9.64
DFP-122LED -D □ E1-S- □ - □	1x 22W.										9.34
DFP-222LED -D □ E1-S- □ - □	2x 22W.										9.64
DFP-125LED -D □ E1-S- □ - □	1x 25W.										10.64
DFP-225LED -D □ E1-S- □ - □	2x 25W.										11.04
DFP-225LED -D □ E2-S- □ - □											11.04
<b>LED PCB</b>											
DFP-25LEDP -D □ E2-S- □ - □	25W.	110-240V.ac	LED Driver	T6	T6	T85°C	T85°C	3.95	750	645	5.65
DFP-30LEDP -D □ E2-S- □ - □	30W.	50/60Hz.									
DFP-50LEDP -D □ E2-S- □ - □	50W.										
DFP-60LEDP -D □ E2-S- □ - □	60W.										
DFP-60LEDP1 -D □ E2-S- □ - □	60W.							7.02	1365	1258	11.04
DFP-75LEDP -D □ E2-S- □ - □	75W.										
DFP-90LEDP -D □ E2-S- □ - □	90W.										

Lighting source; cool white (6500K) are standard and/or warm white (3000K), please specify.



### Catalogue Number Logic (Exit Emergency Light)

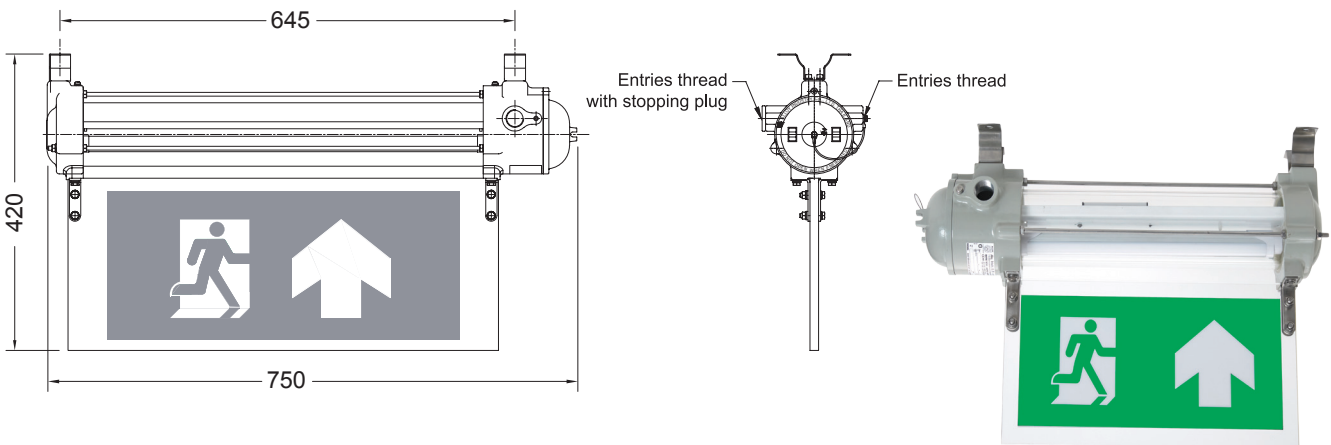
under preparation to supplement

<b>DFP - 109</b>	<b>LED</b>	<b>D</b>	<b>E1</b>	<b>X</b>		<b>S</b>				<b>SP</b>
<b>Series</b>	<b>Lamp Watt</b> 1x 9W.	<b>Type</b> LED   LED tube	<b>LED Driver</b> D   with driver	<b>Accessories</b> E1   Emergency power unit (1-Lamp backup)	<b>Exit</b>	<b>Exit symbol</b>	<b>Body</b> S   Short end cap	<b>Entries</b> M1   M20x1.5 M2   M25x1.5 N1   Ø1/2" NPT N2   Ø3/4" NPT	<b>Mounting</b> C   Ceiling (standard) C1   Ceiling (for pipe), Fixed C2   Ceiling (for pipe), Swing P1   Pendant (for chain) P2   Pendant (for pipe) B   Bracket	<b>Option</b> SP   Surge Protection 10kA, 8/20µF

### Ordering Requirements and Dimension

Cat. No.	Lamp Watt	Voltage	Driver	Temp. Class (for zone 1 & 2)		Max. Surface Temp.* (for zone 21 & 22)		Volume (dm <sup>3</sup> )	Approx. Weight (kgs.)
				Ta 40°C	Ta 55°C	Ta 40°C	Ta 55°C		
<b>LED Tube</b>									
DFP-109LED-DE1X-S--	1x 9W.**	110-240V.ac 50/60Hz.	LED Driver	T6	T6	T85°C	T85°C	3.95	5.8

Remark: \* The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause to higher surface temperature.  
\*\* LED tube with 15° lens



### Exit Signs Symbols (◻)

- A Man Exit Right
- B Man Exit Left
- C Man Exit Up
- D Man Exit Down
- E Exit
- F Exit Left
- G Exit Right
- H Exit Left or Right
- I Man Exit Left or Right

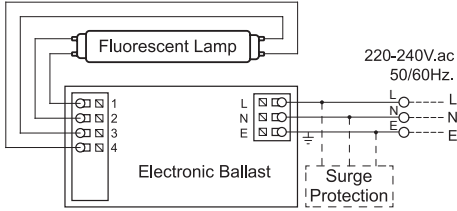
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Flameproof and Dust protection by enclosure

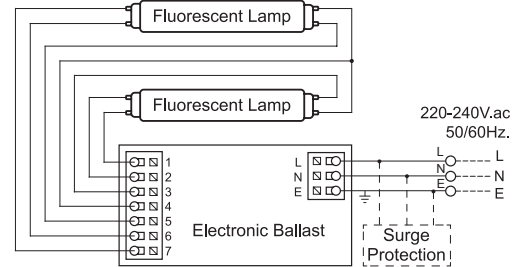
Zone 1 & 2 – 21 & 22

## Wiring Diagram

Electronic ballast for fluorescent lamp;  
1x 14W., 1x 28W., 1x 18W. and 1x 36W.

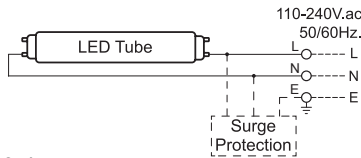


Electronic ballast for fluorescent lamp;  
2x 14W., 2x 28W., 2x 18W. and 2x 36W.

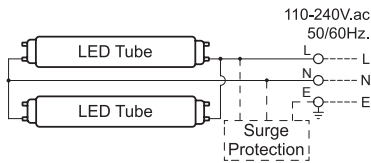


LED Tube without driver

1x Lamp

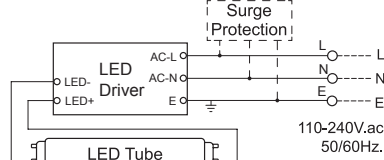


2x Lamp

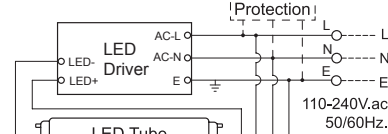


LED Tube or LED PCB with driver

1x Lamp

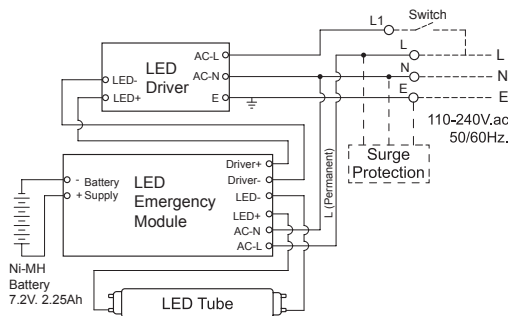


2x Lamp

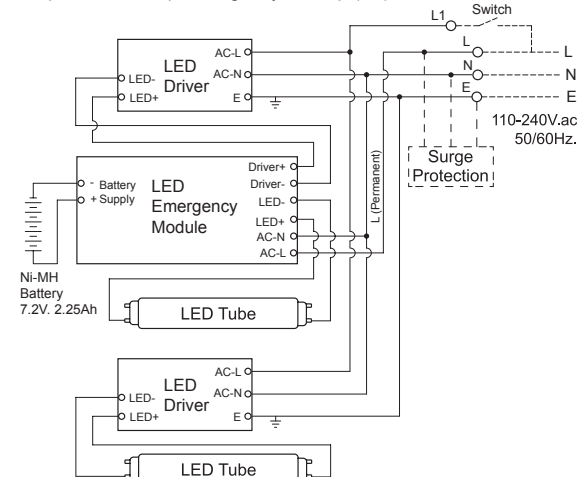


## Wiring Diagram (Emergency)

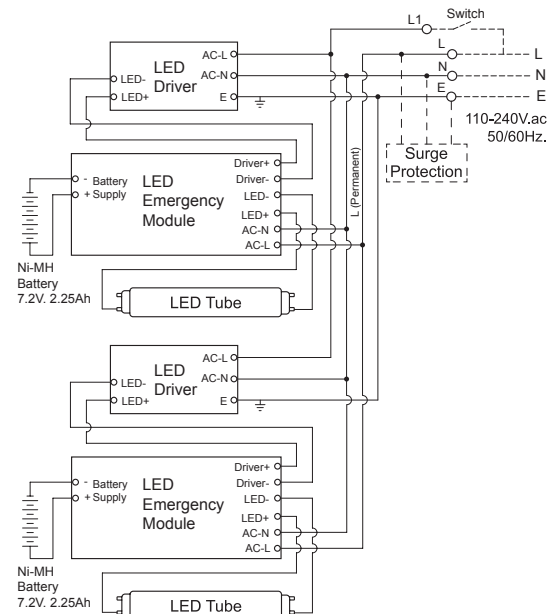
1-Lamp with Emergency backup (E1)



2-Lamps with 1-Lamp Emergency backup (E1)

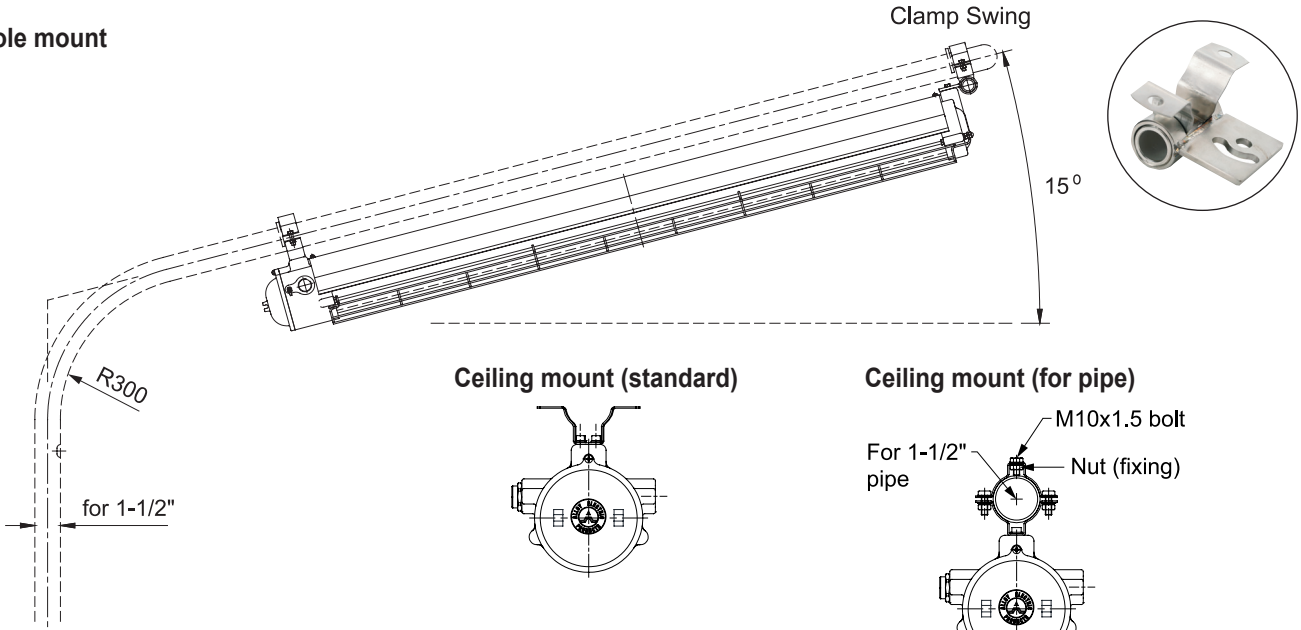


2-Lamps with 2-Lamps Emergency backup (E2)

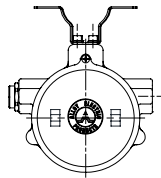


## Installation Information

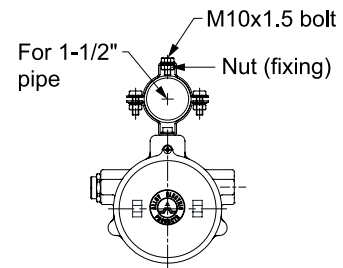
### Pole mount



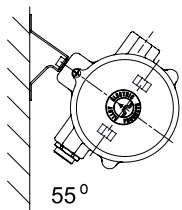
### Ceiling mount (standard)



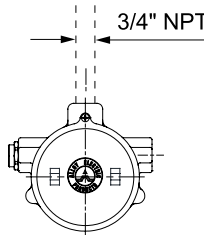
### Ceiling mount (for pipe)



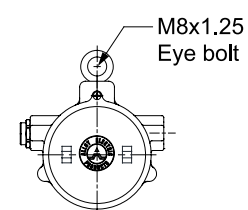
### Bracket mount (or wall mount)



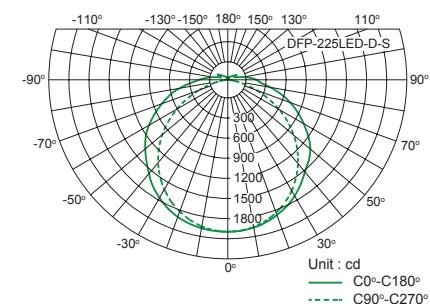
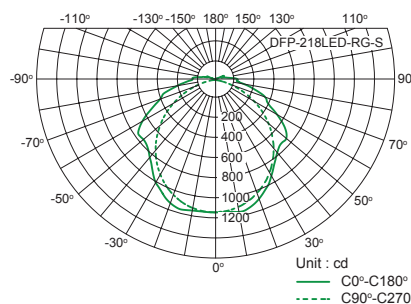
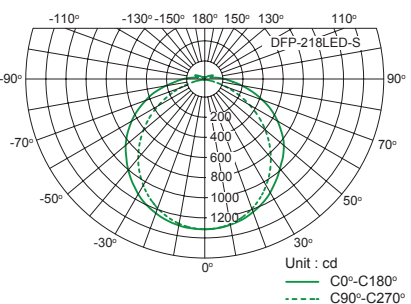
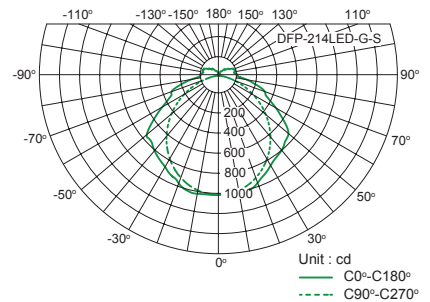
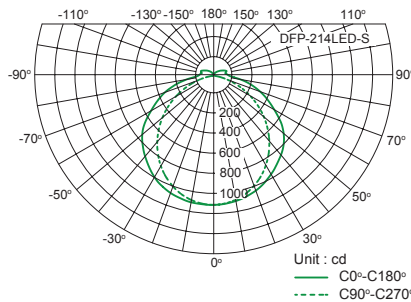
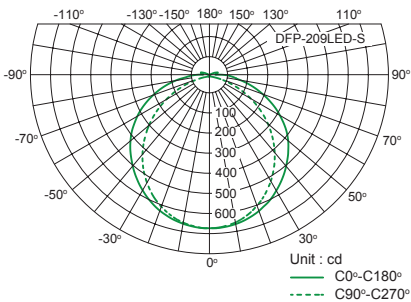
### Pendant mount (for pipe)



### Pendant mount (for chain)



## Luminous Intensity Distribution Curve



Complete photometrics, please contact us.