

# EWA

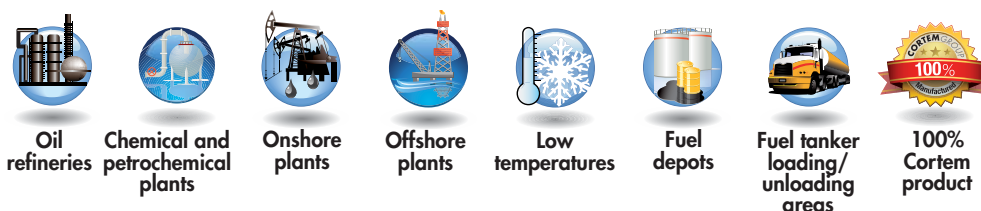
- Suitable for installation with ambient temperatures from  $-50^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Suitable for discharge lamps up to 400W
- Zones 1, 2, 21, 22



EWA series of lighting fixtures for discharge lamps has been designed in compliance with ATEX Directive 94/9/EC for all those areas defined as "hazardous" due to the presence of potentially explosive flammable gases and dusts where good local lighting is a necessity. The body of the lamp is made of low copper content aluminium alloy, the globe is made of borosilicate glass and has excellent thermal and mechanical properties. For this reason, the fixture can also be installed without a protective guard. The resistance of this lighting fixture to high (+60°C) and low (-50°C) temperatures makes it ideal for use in any type of climatic condition and it can be used in plants worldwide.

As EWA series was designed with the "Ex d" protection method the "entry" to the fixture, as specified in the installation standard (EN/IEC 60079-14), must be only through an Ex "barrier" cable gland (sealed) or, in the case of a conduit system, with an EYS, EZS sealing fittings.

## Application sectors:



## CERTIFICATION DATA

<b>Classification:</b> 94/9/EC	Group II	Category 2GD		
<b>Installation:</b> EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
<b>Marking:</b>	CE 0722 Ex II 2GD Ex d IIC T.. Gb - Ex tb IIIC T.. °C Db IP66			
<b>Certification:</b>	ATEX CESI 12 ATEX 006			
	IEC Ex CES 07.0004	All IEC Ex and GOST R certification data can be downloaded at <a href="http://www.cortemgroup.com">www.cortemgroup.com</a>		
	GOST R AVAILABLE			
<b>Standards:</b>	CENELEC EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-31: 2009 and EUROPEAN DIRECTIVE 94/9/EC: 1994 IEC 60079-0: 2012, IEC 60079-1: 2007, IEC 60079-7: 2007, IEC 60079-31: 2009 Directiva Europea 2006/95 Baja tensión Directiva Europea 2004/108 Compatibilidad electromagnética Directiva Europea 2003/108 RAEE Reciclaje de Aparatos Eléctricos y Electrónicos Directiva Europea 2011/64 RoHS			
<b>Class temperature:</b>	See selection chart			
<b>Ambient temperature:</b>	Standard -20°C +60°C	Special -50°C +60°C (not possible for model EWA...100)		
<b>Degree of protection:</b>	IP66			



ORIGINAL PRODUCT

### MECHANICAL FEATURES


<b>Body:</b>	Low copper content aluminium alloy Complete with housing for electrical components
<b>Globe:</b>	Shock and high temperature resistant borosilicate glass with aluminium shade ring
<b>Gaskets:</b>	Silicone acid/hydrocarbon resistant
<b>Guard:</b>	Electro-polished stainless steel. Can also be supplied on request without a guard as the lighting fixture has passed the glass breakage test (4 Joule EN60079-0 / IEC60079-0)
<b>Mounting:</b>	See "EWA series dimensional drawings"
<b>Bolts and screws:</b>	Stainless steel
<b>Entries:</b>	3/4" NPT threads
<b>Coating:</b>	Epoxy coating Ral 7035 (Light grey)
<b>Corrosion Resistance :</b>	The STANDARD of the aluminium alloy used by Cortem has passed the tests required by standards EN60068-2-30 (hot/humid cycles) and EN60068-2-11 (salt mist tests)

### ELECTRICAL FEATURES

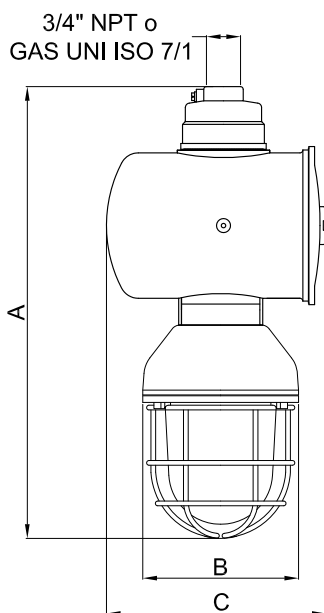
<b>Lamp holder:</b>	E27 or E40 ceramic
<b>Ballast:</b>	Electromechanical
<b>Rated voltage:</b>	230 V AC
<b>Rated frequency:</b>	50 Hz
<b>Connection:</b>	Direct connection to the terminal box L, N, Pe. Section 4mm <sup>2</sup>
<b>Power factor:</b>	0.96
<b>Wiring:</b>	Silicone rubber cables with glass braid insulation for high temperatures

### ACCESSORIES AVAILABLE / SPECIAL REQUESTS

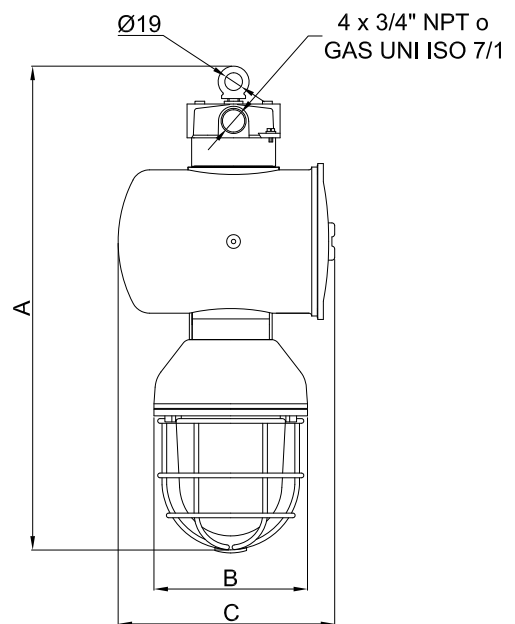
Discharge lamp  
 Different rated voltages  
 Rated frequency: 60 Hz at 230 V (code EWA-5080F5/60)  
 External reflector  
 Cable gland: FGAB2NBK for armoured cable or FB2NBK for non-armoured cable  
 GAS UNI ISO 7/1 thread  
 Bracket for pole mounting

Code	Dimensions mm			Lamp Type	Lamp holder	Watt	Class Ta =+60°C	Max Surface Temp °C	Weight Kg	 mm
	A	B	C							
EWAT-5080N2	610	220	235	Sodium vapour	E 40	100	T4	132	10,6	240x240x660
EWAT-5080N4	610	220	235	Sodium vapour	E 40	150	T4	132	11,4	240x240x660
EWAT-5080N5	610	220	235	Sodium vapour	E 40	250	T3	159	12,7	240x240x660
EWAT-50100N6	677	280	265	Sodium vapour	E 40	400	T3	164	17,1	280x280x850
EWAT-5080IM2	610	220	235	Metal halide	E 27	100	T4	130	10,3	240x240x660
EWAT-5080IM4	610	220	235	Metal halide	E 27	150	T4	130	11,1	240x240x660
EWAT-5080IM5	610	220	235	Metal halide	E 40	250	T3	180	12,7	240x240x660
EWAT-50100IM6	677	280	265	Metal halide	E 40	400	T3	163	15,5	280x280x850
EWAT-5080F5	610	220	235	Mercury vapour	E 40	250	T3	148	10,8	240x240x660
EWAT-50100F6	677	280	265	Mercury vapour	E 40	400	T3	177	15,5	280x280x850
EWAGC-5080N2	655	220	235	Sodium vapour	E 40	100	T4	132	10,4	240x240x660
EWAGC-5080N4	655	220	235	Sodium vapour	E 40	150	T4	132	11,2	240x240x660
EWAGC-5080N5	655	220	235	Sodium vapour	E 40	250	T3	159	12,5	240x240x660
EWAGC-50100N6	722	280	265	Sodium vapour	E 40	400	T3	164	17,9	280x280x850
EWAGC-5080IM2	655	220	235	Metal halide	E 27	100	T4	130	10,1	240x240x660
EWAGC-5080IM4	655	220	235	Metal halide	E 27	150	T4	130	10,9	240x240x660
EWAGC-5080IM5	655	220	235	Metal halide	E 40	250	T3	180	12,4	240x240x660
EWAGC-50100IM6	722	280	265	Metal halide	E 40	400	T3	163	16,6	280x280x850
EWAGC-5080F5	655	220	235	Mercury vapour	E 40	250	T3	148	10,1	240x240x660
EWAGC-50100F6	722	280	265	Mercury vapour	E 40	400	T3	177	16,6	280x280x850


### EWAT Pendant mounting



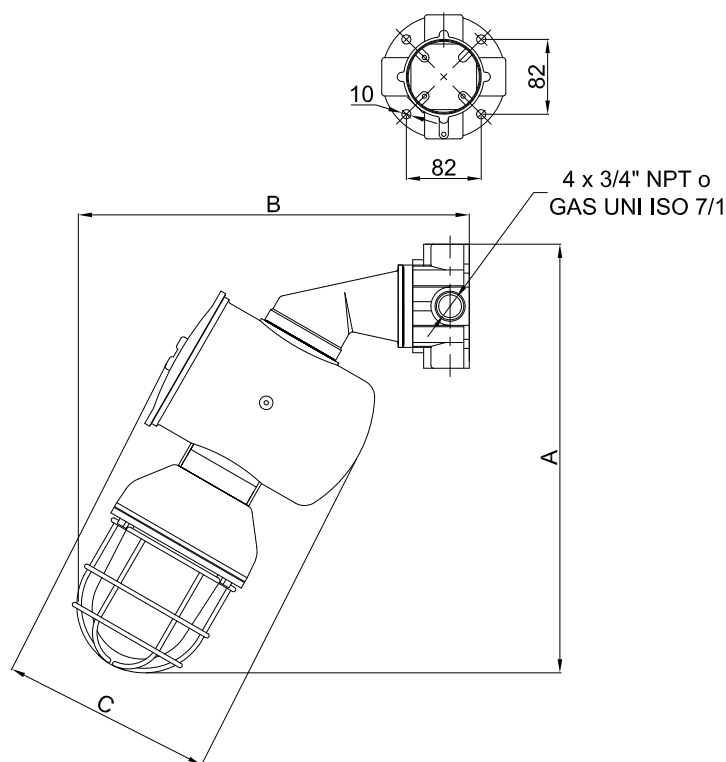
### EWAGC Pendant mounting with eyebolt



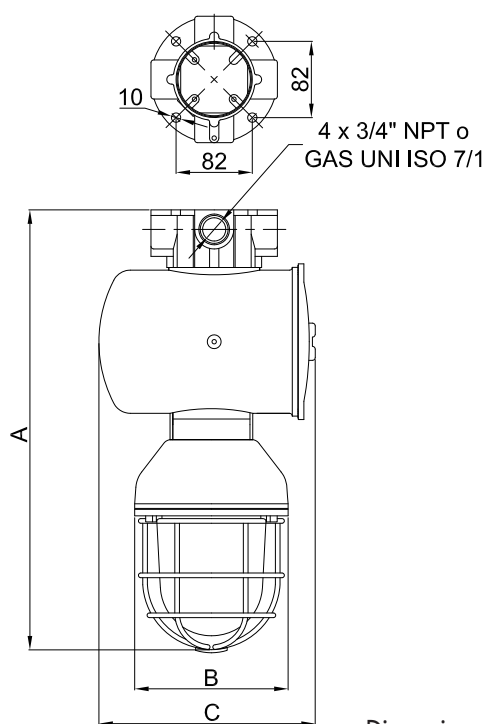
# EWA series selection chart

Code	Dimensions mm			Lamp Type	Lamp holder	Watt	Class Ta =+60°C	Max Surface Temp °C	Weight Kg	 mm
	A	B	C							
EWAIX-5080N2	592	500	235	Sodium vapour	E 40	100	T4	132	10,7	280x280x850
EWAIX-5080N4	592	500	235	Sodium vapour	E 40	150	T4	132	11,5	280x280x850
EWAIX-5080N5	592	500	235	Sodium vapour	E 40	250	T3	159	12,8	280x280x850
EWAIX-50100N6	650	547	265	Sodium vapour	E 40	400	T3	164	15,4	280x280x850
EWAIX-5080IM2	592	500	235	Metal halide	E 27	100	T4	130	10,4	280x280x850
EWAIX-5080IM4	592	500	235	Metal halide	E 27	150	T4	130	11,2	280x280x850
EWAIX-5080IM5	592	500	235	Metal halide	E 40	250	T3	180	12,7	280x280x850
EWAIX-50100IM6	650	547	265	Metal halide	E 40	400	T3	163	14,1	280x280x850
EWAIX-5080F5	592	500	235	Mercury vapour	E 40	250	T3	148	11,4	280x280x850
EWAIX-50100F6	650	547	265	Mercury vapour	E 40	400	T3	177	17,0	280x280x850
EWAX-5080N2	610	220	235	Sodium vapour	E 40	100	T4	132	10,6	240x240x660
EWAX-5080N4	610	220	235	Sodium vapour	E 40	150	T4	132	11,4	240x240x660
EWAX-5080N5	610	220	235	Sodium vapour	E 40	250	T3	159	12,7	240x240x660
EWAX-50100N6	677	280	265	Sodium vapour	E 40	400	T3	164	16,2	280x280x850
EWAX-5080IM2	610	220	235	Metal halide	E 27	100	T4	130	10,3	240x240x660
EWAX-5080IM4	610	220	235	Metal halide	E 27	150	T4	130	11,1	240x240x660
EWAX-5080IM5	610	220	235	Metal halide	E 40	250	T3	180	12,7	240x240x660
EWAX-50100IM6	677	280	265	Metal halide	E 40	400	T3	163	16,0	280x280x850
EWAX-5080F5	610	220	235	Mercury vapour	E 40	250	T3	148	11,4	240x240x660
EWAX-50100F6	677	280	265	Mercury vapour	E 40	400	T3	177	15,9	280x280x850

**EWAIX Wall mounting with 30° bracket**



**EWAX Ceiling mounting**













Dimensions in mm

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	High pressure sodium vapour lamp	E40	100 W (SE100W)	LAMPNAV100WPLUS	 
			150 W (SE150W)	LAMPNAV150WPLUS	
			250 W (SE250W)	LAMPNAV250WPLUS	
			400 W (SE400W)	LAMPNAV400WPLUS	
	Mercury vapour lamp	E40	250 W (QE250W)	LAMP250WHQL	 
			400 W (QE400W)	LAMP400WHQL	
	Metal halide lamp	E27	100 W (ME100W)	LAMP100WJM	 
		E40	150 W (ME150W)	LAMP150WJM	
			250 W (ME250W)	LAMP250WJM	
			400 W (ME400W)	LAMP400WJM	
	Cable gland		For models and codes, visit <a href="http://www.cortemgroup.com">www.cortemgroup.com</a>	FB2NBK FGAB2NBK	 
	Reflector	80	White painted aluminium Stainless steel	G80-427 G80-427IN	 
		100	White painted aluminium Stainless steel	G100-427 G100-427IN	
	Dome reflector	80	White painted aluminium	G80-427D	 
		100	Contact our Sales Office for availability		
	30° inclined dome reflector	80	Contact our Sales Office for availability		 
		100			
	Galvanised steel brackets for pole mounting (see installation and mounting methods)	80	1 1/4" pole	G4-0541	 
		100		G4-0542	
		80	1 1/2" pole	G5-0541	
		100		G5-0542	
		80	2" pole	G6-0541	
		100		G6-0542	
80	2 1/2" pole	G7-0541			
100		G7-0542			

## EWA series Accessories and spare parts available on request

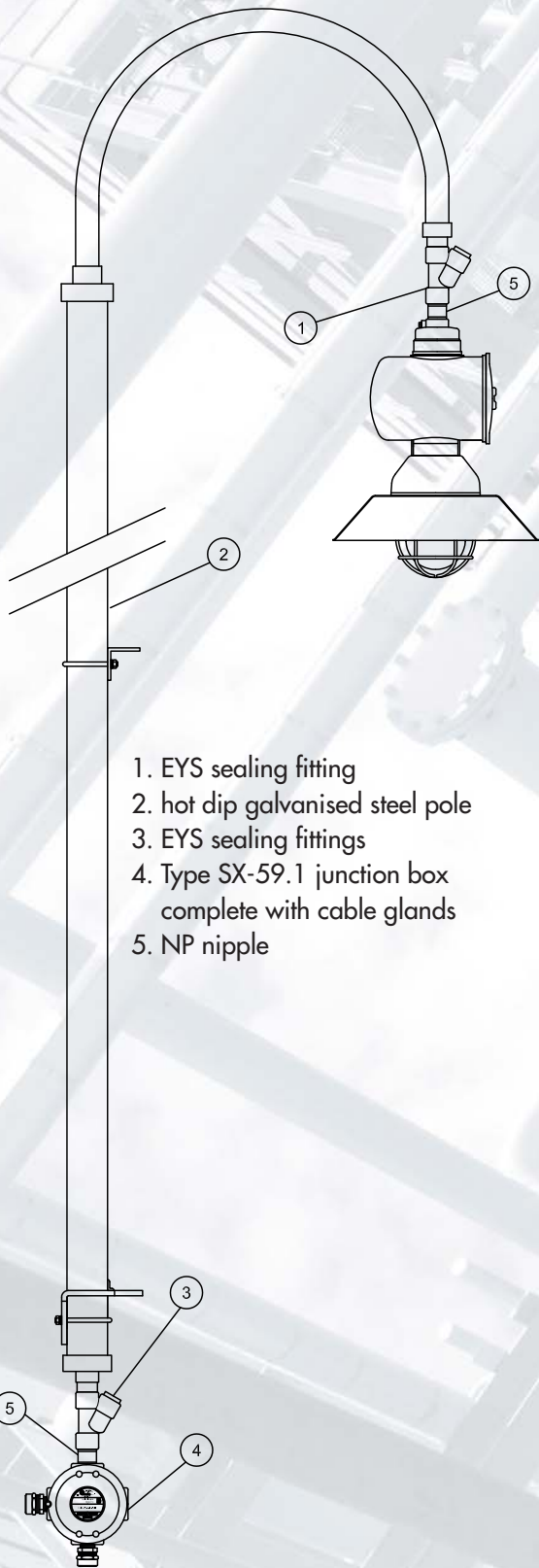
ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	O-ring	Globo 80	Material: silicone	K34-131S	
		Globo 100		K27-131S	
	Ballast for mercury vapour lamp		250 W	R-250	
			400 W	R-400	
	Ballast for sodium vapour and metal halide lamps		100 W	R-100NA	
			150 W	R-150NA	
			250 W	R-250NA	
			400 W (sodium) 400 W (halide)	R-400NA R-400	
	Metal capacitor	5080N2	16µF 250V	F-16	
		5080N4	20µF 250V	F-20	
		5080N5	35µF 250V	F-35	
		50100N6	50µF 250V	F-50	
		5080IM2	12,5µF 250V	F-12,5	
		5080IM4	20µF 250V	F-20	
		5080IM5	30µF 250V	F-30	
		50100IM6	40µF 250V	F-40	
		5080F5	20µF 250V	F-20	
		50100F6	25µF 250V	F-400	
	Ceramic lamp holder	E27	250V 4A	PORT E-27	
		E40	750V 16A	PORT E-40	
	Igniter		50-400 W	R100	
	Globe with shade ring	80	Borosilicate glass globe Threaded aluminium shade ring	G80-0440CM	
		100		G100-0440CM	
	Protective guard	80	Material: electro-polished stainless steel	G80-0417	
		100		G100-0417	

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Pendant eyebolt		In galvanised steel	G0F-8	
	Pendant mounting EWA		1 x 3/4" entry	G-0213	
	Pendant mounting with eyebolt EWAGC		4 x 3/4" entries	G-0216	
	Ceiling mounting EWAX		4 x 3/4" entries	G-0214	
	Wall mountings with bracket EWAIX		4 x 3/4" entries	G-0215	

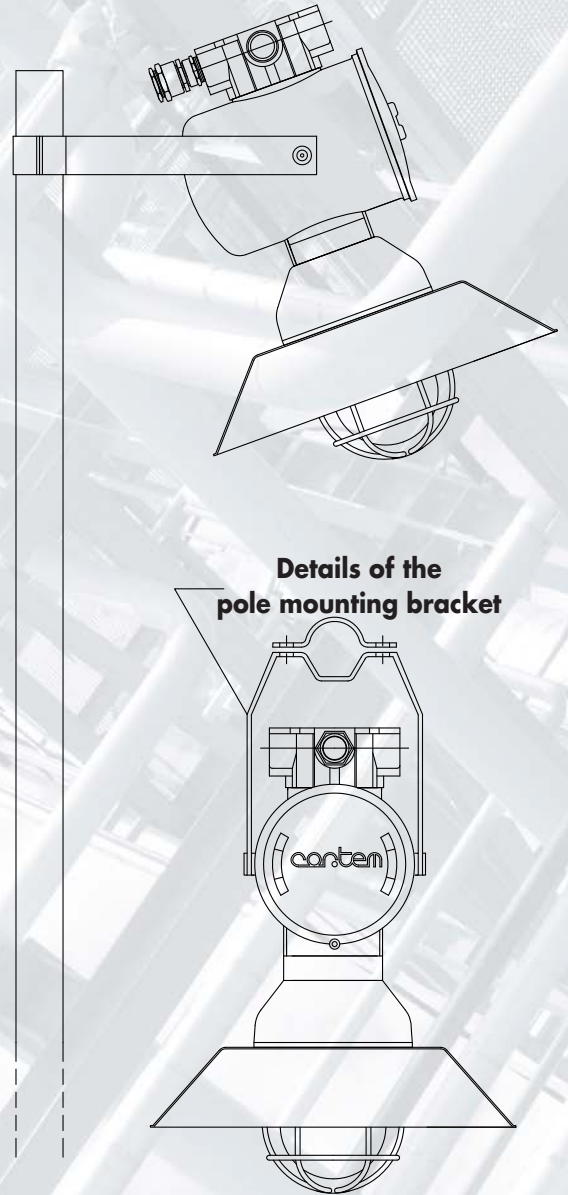


# Installation and mounting methods

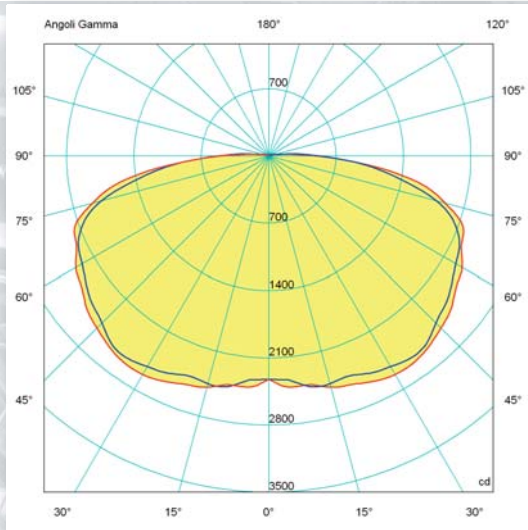
**Example of pole mounting**



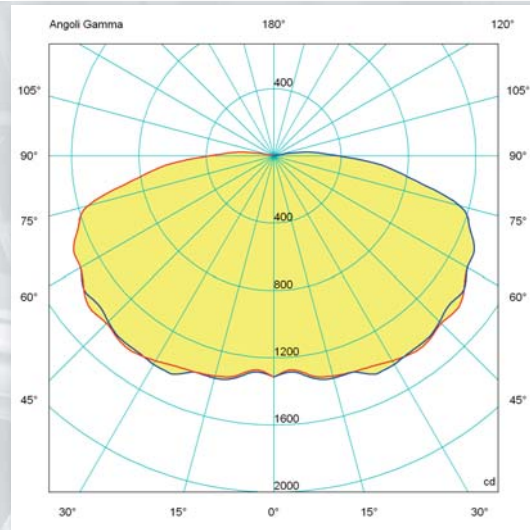
**Pole mounting system with bracket**



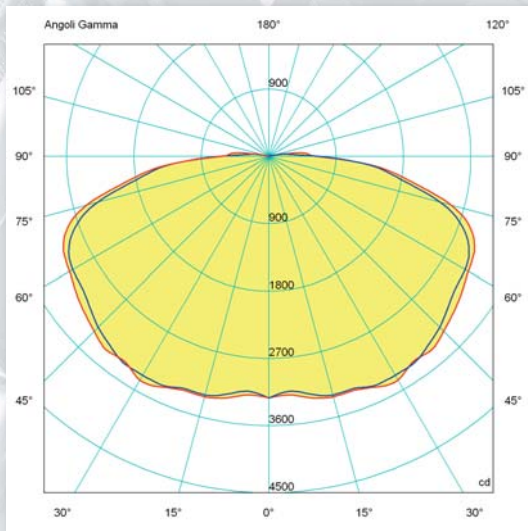
# Photometric diagram



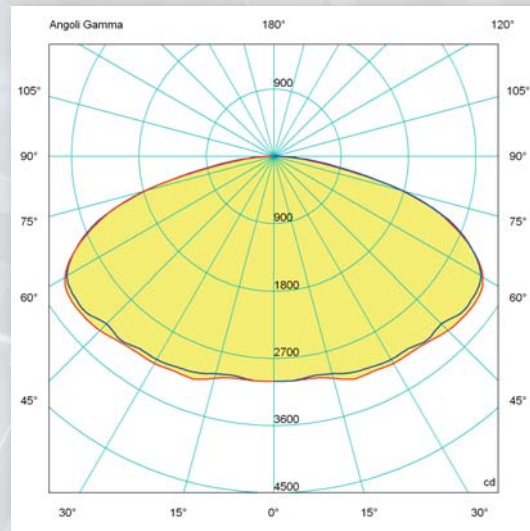
**EWA-5080 250W halide**



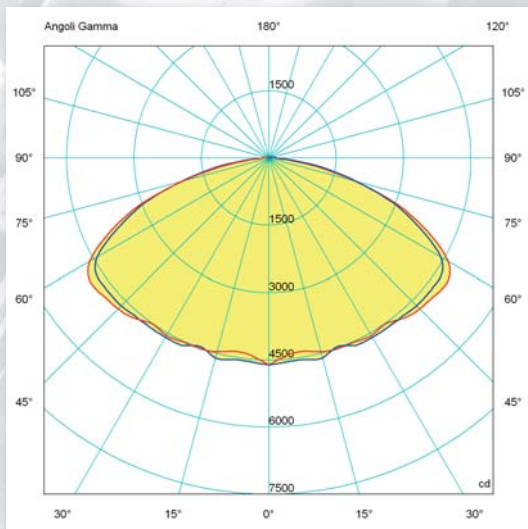
**EWA-5080 250W mercury**



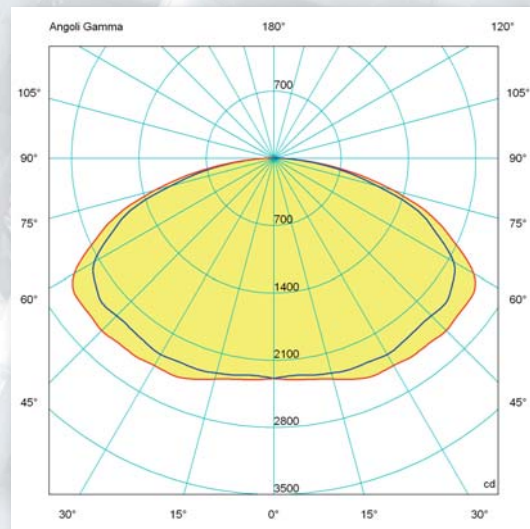
**EWA-5080 250W sodium**



**EWA-50100 400W halide**



**EWA-50100 400W sodium**



**EWA-50100 400W mercury**

Cortem Group can supply photometric diagram files on request for use in special lighting design projects.  
Contact the Sales Office for further information

— = plane 90270  
— = plane C 0180