

## Photometric Guide

### LATERAL LIGHT DISTRIBUTION



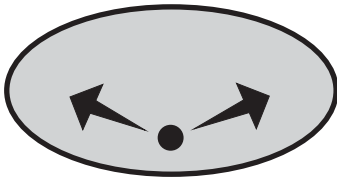
#### TYPE I

Pathway, bikeway and very narrow streets with a large overhang bringing the fixture completely over the street.



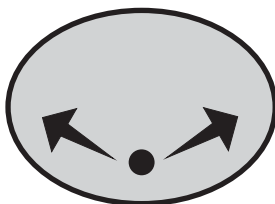
#### TYPE II

Narrow streets not exceeding 1.75 mounting height in width.



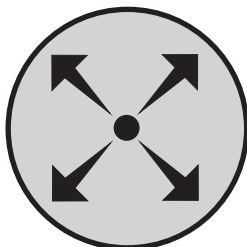
#### TYPE III

Streets with parking on the sides. Fixtures on both sides of the road for larger streets.



#### TYPE IV

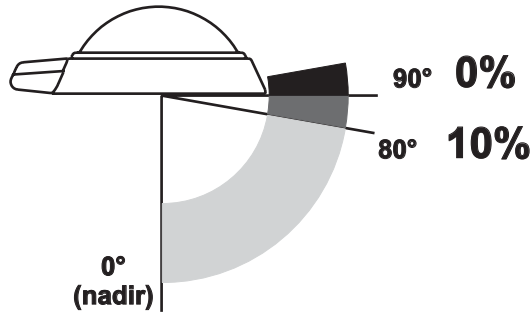
Large areas such as parking lots.



#### TYPE V

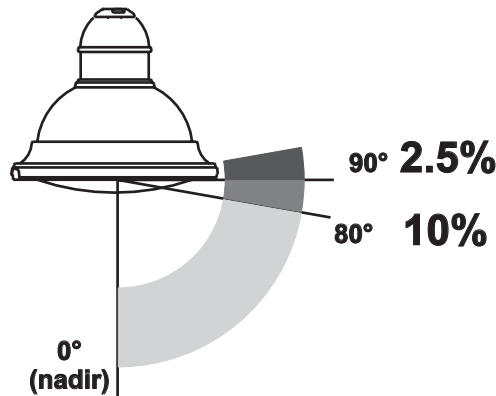
Use for large areas, parks, symmetrical application and ambient lighting.

### UP-LIGHT CLASSIFICATION



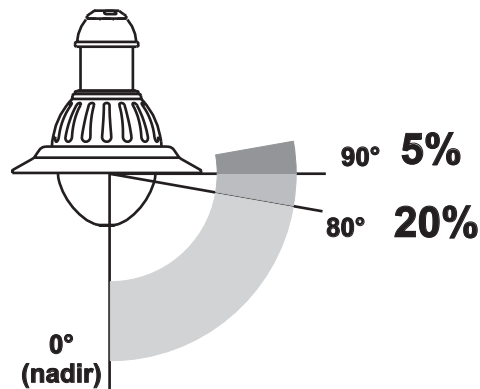
#### FULL CUT-OFF

No light at or over 90° above nadir  
No value exceeding 10% of the maximum candlepower at or over 80° above nadir



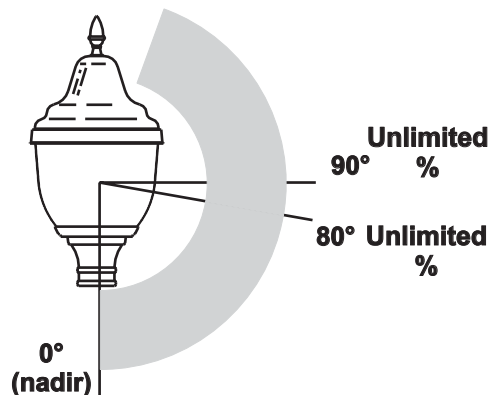
#### CUT-OFF

No value exceeding 2.5% of the maximum candlepower at or over 90° above nadir  
No value exceeding 10% of the maximum candlepower at or over 80° above nadir



#### SEMI CUT-OFF

No value exceeding 5% of the maximum candlepower at or over 90° above nadir  
No value exceeding 20% of the maximum candlepower at or over 80° above nadir




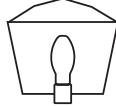

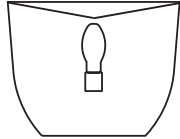
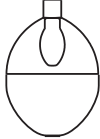
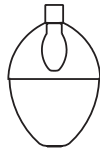


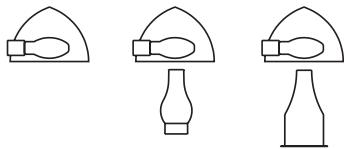

#### NON CUT-OFF

Considerable light is produced above the horizontal plane.

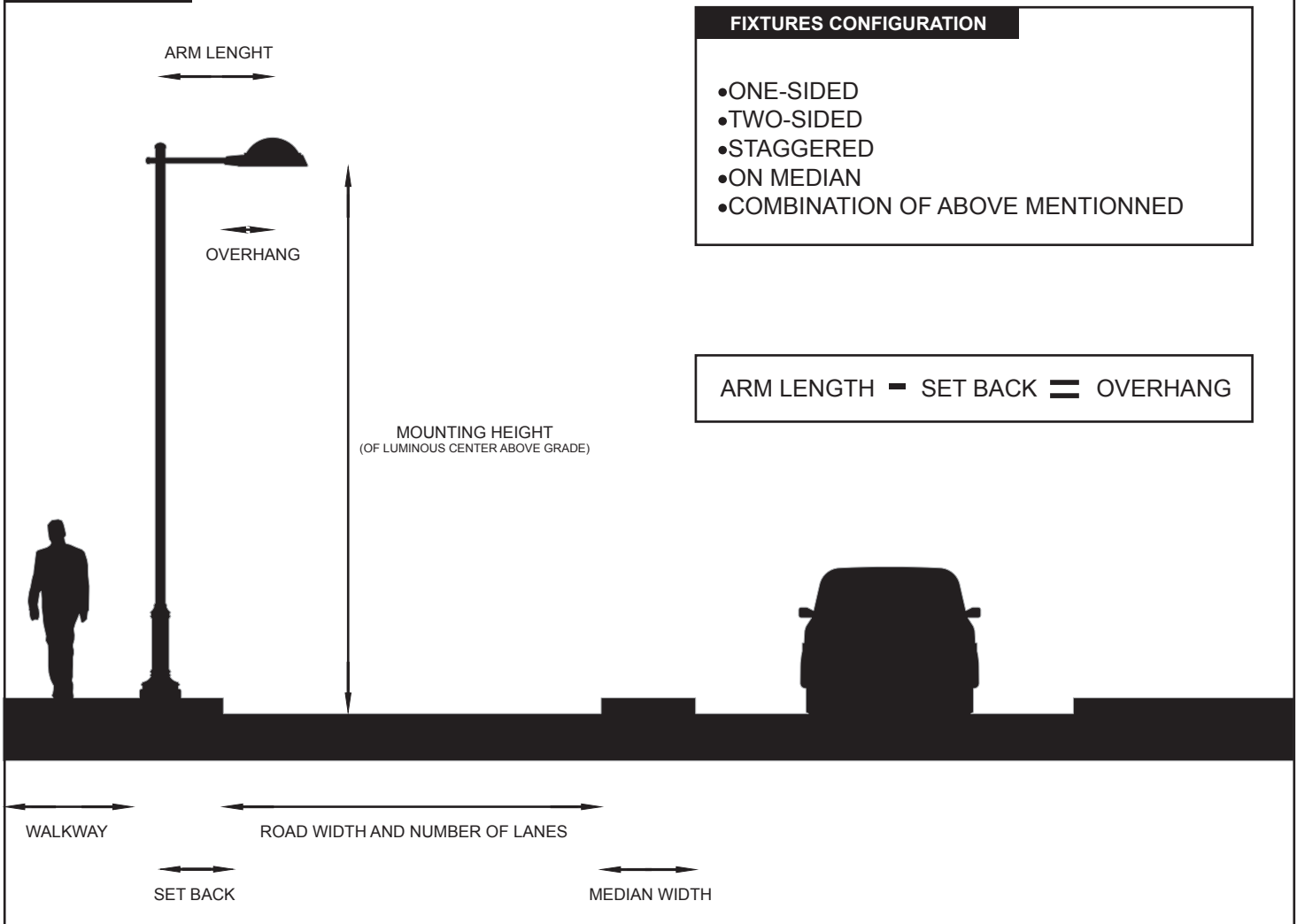
**ORV 3 C /S**

OPTICAL SYSTEM TYPE  
LATERAL LIGHT DISTRIBUTION

OPTION  
UP-LIGHT CLASSIFICATION

REFRACTORS			
<b>NO5N</b>		Non Cut-off Vertical lamp	Bare lamp used without optical system.
<b>OC3N</b> <b>OC5N</b>		Non Cut-off Reflector & Refractor Vertical lamp Type III & type V	Prismatic refractor available in acrylic or polycarbonate combined to a formed reflector. Available in type III & V distributions.
<b>OG3N</b> <b>OG5N</b>		Non Cut-off Glass Refractor Vertical lamp Type III & type V	Heat resistant borosilicate glass refractor. Available in type III & V distributions.
<b>OP3N</b> <b>OP5N</b>		Non cut-off Refractor Vertical lamp Type III & type V	Prismatic refractor available in acrylic (GAC) or polycarbonate (GPC) combined to a formed reflector. Available in type III & V distributions.
<b>OVS3S</b> <b>OVS5S</b>		Non cut-off Refractor Vertical lamp Type III & type V	Prismatic pendant refractor available in acrylic (GAC) or polycarbonate (GPC) combined to a formed reflector. Available in type III & V distributions.
<b>OVL3S</b> <b>OVL5S</b>		Non cut-off Refractor Vertical lamp Type III & type V	Prismatic pendant refractor available in acrylic (GAC) or polycarbonate (GPC) combined to a formed reflector. Available in type III & V distributions.
LOUVERS			
<b>OLS3S</b> <b>OLS5S</b>		Semi cut-off Louvers System (compact version) Vertical lamp Type III & type V	Stacked louver system made of highly reflective aluminum. Available in type III (asymmetrical) & V (symmetrical) distributions.
REFLECTORS			
<b>OCB</b>		Cut-off Reflector Horizontal lamp Type I to IV	Semi specular hydroformed reflector made from anodized aluminum. Available with type I, II, III and IV asymmetrical light distributions.
<b>ORH3C</b> <b>ORH5C</b> <b>ORH3C/S</b> <b>ORH5C/S</b>		Cut-off Reflector Horizontal lamp Type III & type V	Facetted reflector made of highly reflective aluminum. Horizontal lamp. Lanterns come standard with a decorative glass chimney. Also available with a spun cone (/S option) Also available with a house-side shield (/HS option) (consult factory)
<b>ORV3C</b> <b>ORV5C</b> <b>ORV3C/S</b> <b>ORV5C/S</b>		Cut-off Reflector Vertical lamp Type III & type V	Facetted reflector made of highly reflective aluminum. Vertical lamp. Lanterns come standard with a decorative glass chimney. Also available with a spun cone (/S option) Also available with a house-side shield (/HS option) (consult factory)

## TYPICAL LAYOUT



### FIXTURES CONFIGURATION

- ONE-SIDED
- TWO-SIDED
- STAGGERED
- ON MEDIAN
- COMBINATION OF ABOVE MENTIONED

ARM LENGTH = SET BACK = OVERHANG

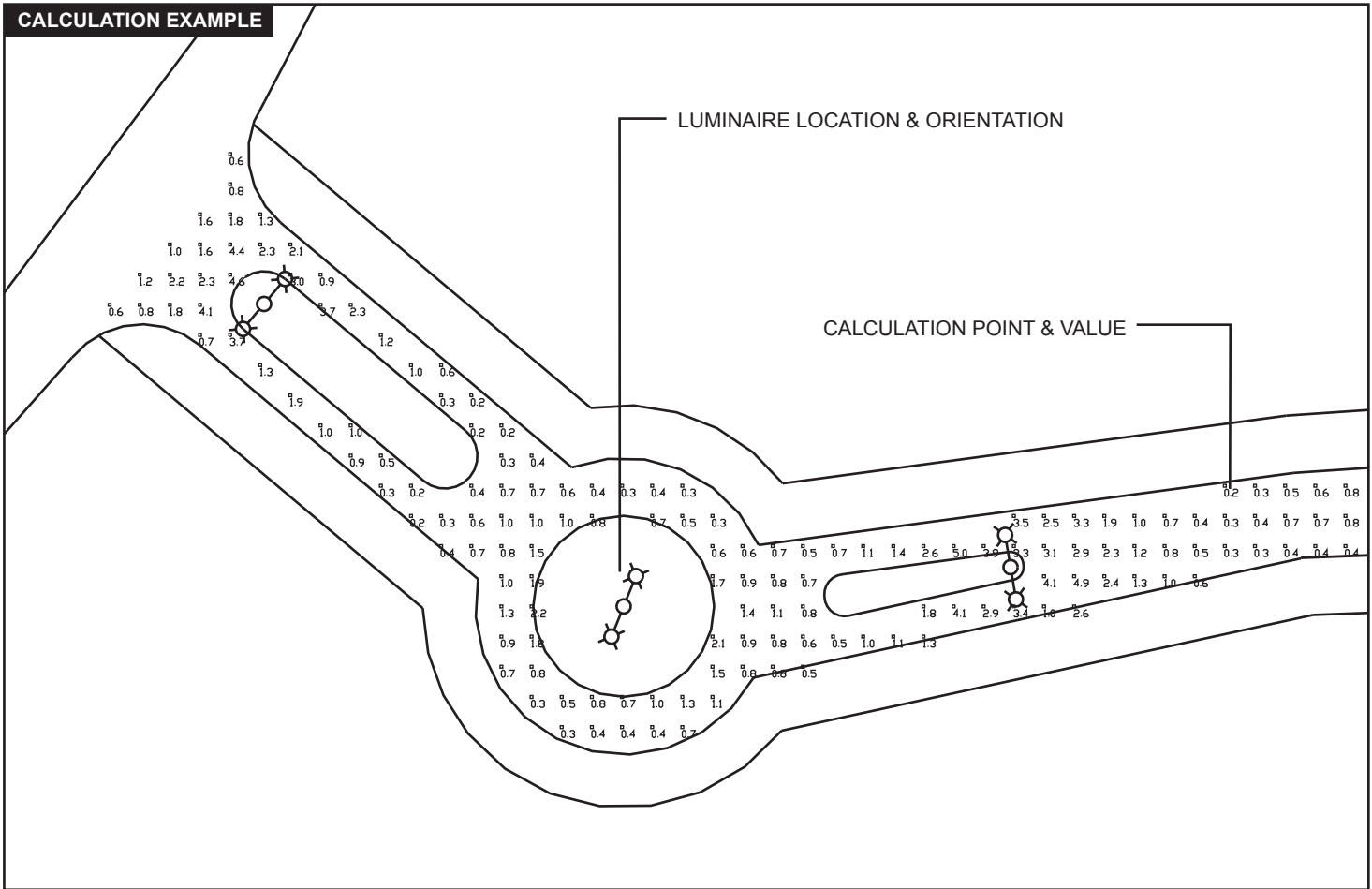
## RECOMMENDED PRACTICE

Illuminance value ( $E_{avg}$ ) for Roadways (in Footcandle)

Road and Area Classification		Pavement Classification	Illuminance Uniformity Ratio
		R2 & R3 (asphalt)	$E_{avg}$ to $E_{min}$
Expressway	Commercial	1,4	3 to 1
	Intermediate	1,2	
	Residential	0,9	
Major	Commercial	1,7	3 to 1
	Intermediate	1,3	
	Residential	0,9	
Collector	Commercial	1,2	4 to 1
	Intermediate	0,9	
	Residential	0,6	
Local	Commercial	0,9	6 to 1
	Intermediate	0,7	
	Residential	0,4	

For approximate values in LUX, multiply by 10

## CALCULATION EXAMPLE



## SUMMARY EXAMPLE

QUANTITY OF FIXTURES

MAINTENANCE FACTOR

FLUX FOR EACH FIXTURE

### Luminaire Schedule

Project:

Symbol	Qty	Label	Arrangement	Lumens	LLF	Description	Watts
⊗-○-⊗	3	PR7800-ORV3C-DOUBLE	BACK-BACK	16000	0.720	2.5ft arm,	150

### Numeric Summary

Project:

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
LAYOUT	Illuminance	Fc	1.40	2.82	0.47	3.00	6.00

ILLUMINANCE AVERAGE VALUE

AVERAGE TO MINIMUM UNIFORMITY RATIO