## PBR1-F LED Flat Top Bollard



#### **DESCRIPTION**

The PBR1-F flat top bollard is a cost effective and versatile outdoor lighting addition to pathways and building entrances at retail centers, business parks, schools, transit centers, and medical facilities. Choice of optics include internal prismatic glass lenses, cone reflectors, or internal louvers. A matte diffused polycarbonate lensing is also available. The bollard is available in three heights to meet scale requirements. Options include fusing, surge suppressors, GFCI outlets, house side shielding, microwave occupancy sensors, and emergency battery backup for added versatility.

Date:	_ Type:	_ Catalog Number:
Project Name:		







#### ORDERING INFORMATION

FIXTURE	MODEL	CCT	DRIVER	OPTICS	LENS	FINISH	HEIGHT	OPTIONS
PBR1-F	10W	<b>30K</b> 3000K	<b>UNV</b> 120-277V	T3 Type III	PGR Prismatic Glass Refractor	<b>BRZ</b> Bronze	<b>42</b> 42" (standard)	SF Single Fuse (120-277V Only)
	15W	<b>40K</b> 4000K	<b>347V</b> 347-480V (15W Only)	<b>T5</b> Type V	SCR Specular Cone Reflector	<b>BLK</b> Black	<b>36</b> 36"	DF Double Fuse (120-277V Only)
	22W	<b>50K</b> 5000K			WCR White Cone Reflector	<b>CC</b> Custom	<b>30</b> 30"	<b>SP</b> Surge Protection
					LVR¹ Louvers			GFCI GFCI Outlet, 15A, 120V
					<b>DPC</b> Diffuse Polycarbonate			HSS180 180° House Side Shield
								MS Internal Microwave Sensor (120-277V Only)
								EM

NOTE: Mounting kit with brackets and (3) 8" anchor bolts come standard with each bollard.

#### **CONTROLS**

Fixtures Ordered with Factory-Installed Photocell or Motion Sensor Controls are Internally Wired for Switching and/or 1-10V Dimming Within the Housing. Remote Direct Wired Interface of 1-10V Dimming is Not Implied and May Not Be Available, Please Consult Factory.

Battery Backup, 90 minutes

<sup>1</sup> Type V optics only

# PBR1-F LED Flat Top Bollard



### PRODUCT SPECIFICATIONS

LUMEN OUTPUT	Up to 2,461 @ 5000K (see photometric data chart for details)							
LUMEN MAINTENANCE	.70): >147,000 @ 25°C							
COLOR TEMPERATURES	000К, 4000К, 5000К							
CRI	80CRI							
OPTICS	Clear Prismatic Borosilicate Glass Refractor, Specular or White Cone Reflector, or Internal Louvers.  Optional 180° house side shields available for non-louvered optics. Diffused polycarbonate lensing also available.							
OPERATING TEMPERATURE	-40°C to +40°C (-40F to +104F)							
POWER CONSUMPTION	Array: 10w Array: 14.5w Array: 22w System: 11.3w System: 23.8w							
DRIVERS	Electronic Driver, 120-277V, 50/60Hz or 347V, 50/60Hz; Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 2kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps.							
CERTIFICATIONS	BAA comments and the second se							
INGRESS PROTECTION	IP65 Sealed LED Compartment, Listed for Wet Locations							
HOUSING	Extruded Aluminum Housing with Flush Mounting Base & Vandal-Resistant Screw, Domed Top, Internal Ballast Tray or Easy Maintenance. Bollards Can Be Cut to Custom Lengths Upon Request.							
FINISH	Textured Architectural Bronze or Black Powdercoat Finish Over a Chromate Conversion Coating. Custom Colors Available Upon Request.							
MOUNTING OPTIONS	Mounting Kit with with 8" Anchor Bolts, Included.							
WARRANTY	5-Year Warranty for -40°C to +40°C Environment							

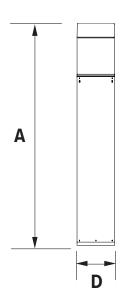
#### **OPTICS**

PRISMATIC GLASS REFRACTOR	CONE REFLECTOR	OPTIONAL HOUSE SIDE SHIELD	LOUVERS	DIFFUSE POLYCARBONATE

# PBR1-F LED Flat Top Bollard



DOME TOP BOLLARD									
DIAMETER ( D )	7"								
HEIGHT (A)	42" (Standard) 36" 30"								



#### **ACCESSORIES**

#### MK04AB

Mounting Kit, Includes Bracket & Three (3) 4" Anchor Bolts

#### MK12AB

Mounting Kit, Includes Bracket & Three (3) 12" Anchor Bolts

#### MK15AB

Mounting Kit, Includes Bracket & Three (3) 15" Anchor Bolts

#### RFBASE

Nollard Retrofit Base Kit Adapts New Bollards to Most Existing Bolt Patterns. Die Cast with Powdercoat Finish, Hardware Included. 111/2" Dia. x 11/2" H

#### MSPRGMR

Remote Programming Tool for Internal Microwave Sensor



## PROJECTED LUMEN MAINTENANCE

Data shown for 5000 CCT											
TM-21-11	Input Watts	Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life					
L70 Lumen Maintenance @ 25°C / 77°F			0.95	0.90	0.80	147,000					
L70 Lumen Maintenance @ 50°C / 122°F	All Wattages	1.00	0.89	0.78	0.55	67,000					
L80 Lumen Maintenance @ 40°C / 104°F			0.92	0.85	0.70	66,000					

#### NOTES:

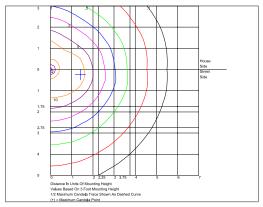
1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the 525mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

# PBR1-F

## LED Flat Top Bollard

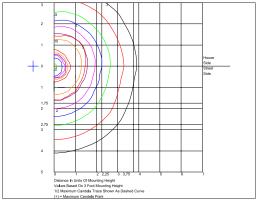


#### PHOTOMETRIC DATA



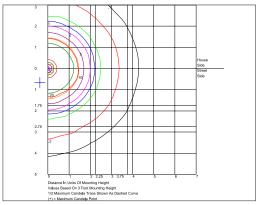
## PBR1-22W-50K-UNV-T5-PGR Grid in feet, mounting height = 3 '



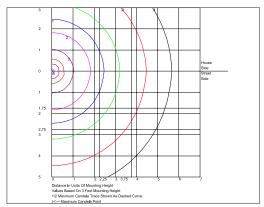


### PBR1-22W-50K-UNV-T5-LVR

Grid in feet, mounting height = 3 '



## **PBR1-22W-50K-UNV-T5-SCR/WCR** Grid in feet, mounting height = 3 '



#### PBR1-22W-50K-UNV-T5-DPC

Grid in feet, mounting height = 3 '

## PHOTOMETRIC PERFORMANCE

	3000 CCT 80 CRI				40	000 CCT 8		5000 CCT 80 CRI										
LED Board Watts	Drive Currently (mA)	Input Watts	Optics	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
10	500	11.3	T3 - PGR	787	69.6	1	3	1	853	75.5	1	3	1	889	78.7	1	3	1
15	700	15.9	Type III Prismatic	1,101	69.2	1	3	1	1,195	75.2	1	3	1	1,245	78.3	1	3	1
22	1050	23.8	Glass Refractor	1,652	69.4	1	3	1	1,792	75.3	1	3	1	1,867	78.4	1	3	1
10	500	11.3	T5 - PGR Type V Prismatic	768	68.0	1	3	1	833	73.7	1	3		868	76.8	1	3	1
15	700	15.9		1,076	67.7	1	3	1	1,167	73.4	1	3		1,215	76.4	1	3	1
22	1050	23.8	Glass Refractor	1,613	67.8	1	3	1	1,750	73.5	1	3		1,823	76.6	1	3	1
10	500	11.3	T5 - LVR	531	47.0	0	2	0	576	51.0	0	2	0	600	53.1	0	2	0
15	700	15.9	Louvers	744	46.8	1	2	1	807	50.8	1	2	1	841	52.9	1	2	1
22	1050	23.8	(Type V only)	1,116	46.9	1	3	1	1,211	50.9	1	3	1	1,261	53.0	1	3	1
10	500	11.3	T3 - SCR / WCR	738	65.3	0	2	1	800	70.8	0	2	1	834	73.8	0	2	1
15	700	15.9	Type III Specular or White Cone	1,033	65.0	1	3	1	1,120	70.4	1	3	1	1,167	73.4	1	3	1
22	1050	23.8	Reflector	1,549	65.1	1	3	1	1,680	70.6	1	3	1	1,750	73.5	1	3	1
10	500	11.3	T5 - SCR / WCR	1,037	91.8	1	3	1	1,125	99.6	1	3	1	1,172	103.7	1	3	1
15	700	15.9	Type V Specular or White Cone	1,452	91.3	1	3	1	1,575	99.1	1	3	1	1,641	103.2	1	3	1
22	1050	23.8	Reflector	2,178	91.5	1	3	1	2,362	99.2	1	3	1	2,461	103.4	1	3	1