

DESCRIPTION

Boca 696 is a compact 6-1/4" diameter by 9-1/4" deep in-ground LED luminaire. The adjustable lamp assembly provides +/- 22° vertical tilt and 360° horizontal rotation for precision uplighting, wall washing or general illumination in constricted areas. Designed for recessed mounting in concrete, brick, stone or dirt, it is suitable for drive-over applications. Fixture is also suitable for recessed mounting in indoor or outdoor wood flooring. A surface mount trim option is also available. Various lenses, louvers and color or dichroic filters can be combined – up to three at once – to create multiple lighting effects.

Catalog #	Type
Project	
Comments	
Prepared by	

SPECIFICATION FEATURES

Construction

Recessed housing is constructed from corrosion-resistant, glass reinforced polyester BMC molding compound and includes two 1/2-14 NPSM conduit fittings for through wiring. Recessed housing and trim ring are sealed with a high temperature silicone molded gasket to prevent water intrusion. The painted trim ring is precision machined from corrosion resistant 6061-T6 aluminum. The trim ring is also available in machined C360 brass, C932 bronze*, C10 copper or 303/304 stainless steel, brass, bronze* or machined copper.

Finish

The painted trim is double protected by a ROHS* compliant chemical film undercoating and polyester powder coat finish. A variety of standard colors are available or RAL and custom color matches are available upon request. Trims constructed from brass, bronze*, copper and

stainless steel are left unpainted to reveal the natural beauty of the material. Brass, bronze* and copper will patina naturally over time.

Lens

Minimum 1/4" thick tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion. Suitable for drive-over applications up to 5000 pounds.

Hardware

Stainless steel hardware is standard to provide maximum corrosion-resistance.

Electrical

When ordered as a line voltage fixture, an integral 12V magnetic transformer is included for connection to 120V, 230V, 240V, or 277V line voltage (specify). When ordered as a low voltage fixture, a remote 12V transformer is required (not included). Dimming only available for 120V option. See technical notes for compatible dimmer switches.

LED Modules

LED modules are included and are available in four color temperatures (2700,3000,4000,5700) or Amber (585-595nm) and three distributions (spot, narrow, and flood). Both color temperature and distribution must be specified when ordering. Module has a L70 / 60,000 hour rating.

Warranty

Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers carry the original manufacturer's warranty.

Recessed Housing

Recessed housing is available to ship in advance of complete fixture for rough-in purposes. Specify option -LBB and order separately the accompanying recessed housing from below.

Recessed Housing
600-BB

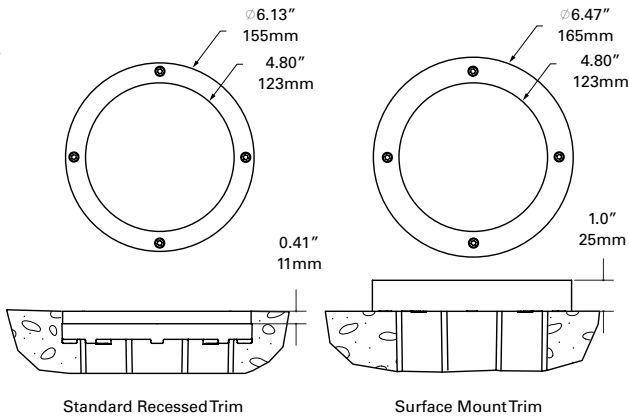
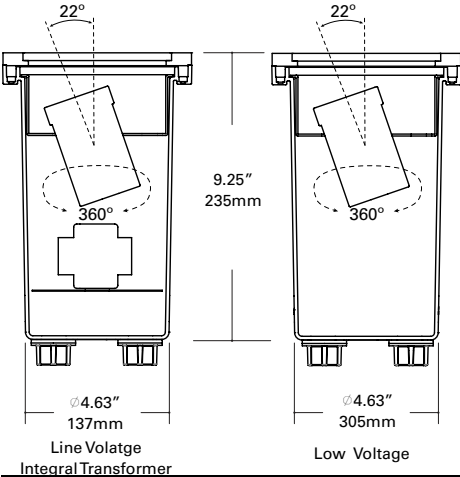


696-SM

BOCA

LED

APPLICATIONS:
GROUND-MOUNT
RECESSED



CERTIFICATION DATA

UL and cUL Wet Location Listed
LM79 / LM80 Compliant
LM70 / 60,000 Hours
ROHS* Compliant
IP67 Ingress Protection Rated

TECHNICAL DATA

External Supply Wiring 90°C Minimum

ORDERING INFORMATION

Sample Number: 696-10LED2712-120/12-BK

Series	Trim	Source (select from each column and combine)			Voltage	Finish ¹	Options ²
696=6 1/4" dia. Boca Inground LED Uplight, 22° Tilt, 360° Rotation	[Blank]= Standard Round Trim SM= Round Surface Mount Trim	6LED=6W LED	27=2700K	12=12° Spot	12=12 Volt Remote Transformer Required (not included) 120/12=120V Integral Transformer 230/12=230V Integral Transformer 240/12=240V Integral Transformer 277/12=277V Integral Transformer	<u>Painted</u> BK=Black BZ=Bronze CS=City Silver VE=Verde WT=White <u>Premium Finish</u> NBR=Natural Brass NCP=Natural Copper NBZ=Natural Bronze* NSS=Natural Stainless Steel	LBB=Less Back Box
		10LED=10W LED	30=3000K 40=4000K 57=5700K	21=21° Narrow 41=41° Wide			
		4LED=4W LED 7LED=7W LED	AM=Amber (585-595nm)				

NOTES: 1 Custom and RAL color matching available upon request. Consult factory for further information. 2 When specifying LBB option the back box needs to be ordered separately 600-BB.

*For natural bronze ROHS material consult factory.

ACCESSORIES - ORDER SEPARATELY

Dichroic Filters (2.00" Diameter)	Color Filters (2.00" Diameter)	Optical Lenses (2.00" Diameter)	Optical Louvers (2.00" Diameter)
F71 = Peach Dichroic F72 = Amber Dichroic F73 = Green Dichroic F74 = Medium Blue Dichroic F75 = Yellow Dichroic F76 = Red Dichroic F77 = Dark Blue Dichroic F78 = Light Blue Dichroic F79 = Neutral Density Dichroic F80 = Magenta Dichroic	F22 = Red Color F33 = Blue Color F44 = Green Color F55 = Yellow Color F66 = Mercury Vapor	LSL =Linear Spread Lens (elongates standard beam spread) DIF =Diffused Lens (provides even illumination) OSL =Overall Spread Lens (increases standard beam spread)	LVR =45° Hex Cell Louver (reduces glare)

PHOTOMETRY

OPTIC TYPE (beam spread)	BASE + ACCESSORY OPTIONS	4000K CCT					
		10W			6W		
		CBCP	LUMENS	LPW	CBCP	LUMENS	LPW
12°	BASE	8049	418	44	6037	314	53
	+ DIF (DIFFUSE)	1188	336	36	891	252	43
	+ OSL (OVERALL SPREAD LENS)	886	368	40	665	276	47
	+ LSL (LINEAR SPREAD LENS)	NA	378	41	NA	284	48
	+ LVR (HEXCELL LOUVER)	6799	332	35	5099	249	42
21°	BASE	2129	370	40	1597	278	47
	+ DIF (DIFFUSE)	648	300	33	486	225	38
	+ OSL (OVERALL SPREAD LENS)	596	337	37	447	253	43
	+ LSL (LINEAR SPREAD LENS)	NA	329	36	NA	247	42
	+ LVR (HEXCELL LOUVER)	2007	268	29	1505	201	34
41°	BASE	1169	361	39	877	271	46
	+ DIF (DIFFUSE)	410	278	30	308	209	36
	+ OSL (OVERALL SPREAD LENS)	509	318	35	382	239	41
	+ LSL (LINEAR SPREAD LENS)	NA	315	34	NA	236	40
	+ LVR (HEXCELL LOUVER)	1004	213	23	753	160	27

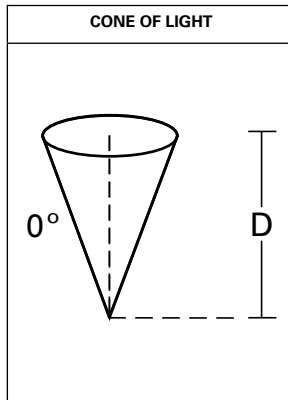
CCT MULTIPLIER TABLE

CCT(K) / COLOR	MULTIPLIER
2700K	0.79
3000K	0.86
4000K	1.00
5700K	1.05
AMBER	0.57

Note: Multiplier can be used to calculate center beam candle power (CBCP), Lumens and footcandle (FC) values.

CONE OF LIGHT

Horizontal Illuminance on Surface - Boca 696 CCT of 4000K with Various Beam Spreads



Filename: 696-10LED4012-12-BK.ies			
Test No.: P26954			
D	FC	Beam Diameter	
2'	2012.2	0.4	
4'	503.1	0.8	
6'	223.6	1.2	
8'	125.8	1.6	
10'	80.5	2.0	
15'	35.8	3.0	
20'	20.1	4.0	
30'	8.9	6.0	
40'	5.0	8.0	

Filename: 696-10LED4021-12-BK.ies			
Test No.: P26955			
D	FC	Beam Diameter	
2'	532.2	0.6	
4'	133.1	1.4	
6'	59.1	2	
8'	33.3	2.8	
10'	21.3	3.4	
15'	9.5	5.2	
20'	5.3	7	
30'	2.4	10.6	
40'	1.3	14.2	

Filename: 696-10LED4041-12-BK.ies			
Test No.: P26953			
D	FC	Beam Diameter	
2'	289.9	0.8	
4'	72.5	1.6	
6'	32.2	2.5	
8'	18.1	3.4	
10'	11.6	4.2	
15'	5.2	6.4	
20'	2.9	8.5	
30'	1.3	12.9	
40'	0.7	17.2	

TECHNICAL INFORMATION

- When selecting integral transformer option, dimming is only possible at 120V using a magnetic dimmer switch. There are two compatible magnetic dimming switches: Lutron Ariadni AVL-600P and Lutron Diva DVLV-600P
- When selecting low voltage option dimming is dependant on remote transformer compatibility with LED module.
- IMPORTANT:** For the low voltage option - when sizing the transformer use 9 watts for 6LED or 15 watts for 10LED option fixture. Nominal power draw after start up is 6 watts or 10 watts accordingly. The LED module is designed to operate between 10 and 13 volts. Any less or more voltage can cause premature failures.
- IMPORTANT:** Apply gray duct sealing compound (not included) to completely seal the wires inside the bottom male conduit nipple. Completely seal the bottom of the fixture. The gray duct sealing compound by itself cannot seal the hubs. We recommend using re-enterable potting seal material such as 3M High Gel 4442 re-enterable encapsulant (not included) to completely seal the bottom of the fixture and the conduit lines.
- Suitable for installation in combustible materials such as wood decking.