# Large Format High Output Module For Sconce and Close-to-Ceiling

## Features and Benefits

- 9" donut design provides even illumination
- 5.22" center hole allows small driver to be placed inside of module for reduced shadows on lens
- Ideal for ADA, commercial or decorative luminaires: close to ceiling, drums, pendants, sconces, etc.
- LED spacing optimized to provide continuous illumination when using frosted or opaque lens
- Latest generation LED for high efficacy and color consistency
- Pre-wired pigtails are mechanically robust and reduce labor
- Requires no heatsink at 40°C ambient in most luminaires
- Lumens/power can be doubled for exterior applications up to 50°C with proper heatsink, consult factory

## **Compatible LED Drivers**

Recommended	Maximum DC Input Current to Module	1050mA
Typical DC input	voltage to Module	30V

## **Ratings and Performance Specifications**

Nominal DC Power Consumption	See Table 1
Recommended Screw Installation Torque	75 inch ounces
Maximum Operating Range Ambient Temperature (Ta)	40 to +50°C
Maximum Solder Pad Temperature (Ts)	+105°C
Estimated Lumen Depreciation (TM-21)70% initial lumens (L70) @	100,000 hours
Nominal Weight	200 grams
Safety/Compliance UL Class 2 Recognized Component	E321468

## **Application Notes**

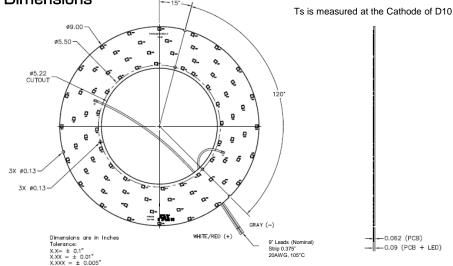
- 1. The use of any washer (lock, flat, etc.), will void the warranty due to possible damage and/or shorting of LED and/or circuit board.
- 2. This module does not require heatsink. The luminaire design should allow heat to escape the system. Forzlux provides thermal testing of light engines in the luminaire for OEM customers to ensure long life and compliance with warranty.
- 3. Abnormal operating conditions such as elevated ambient temperatures can negatively impact lumen output, product lifetime and/or performance.







## Physical Dimensions



## Table 1, Performance Characteristics at 25°C

Data from laboratory test measurements, actual results may vary.

				Nominal	Nominal
			Nominal	Power	Module
	Nominal		Light Output	Consumption	Efficacy
	ССТ	Minimum	@ 1000mA	@ 1000mA	@ 1000mA
Part Number	(Kelvin)	CRI	(Lumens)	(WDC)	(DC LPW)
BB80MB-27-80-01	2700	80	4754	30	158
BB80MB-30-80-01	3000	80	4907	30	164
BB80MB-35-80-01	3500	80	5031	30	168
BB80MB-40-80-01	4000	80	5031	30	168
BB80MB-50-80-01	5000	80	5338	30	178

## Options available

Other CCT and CRI may be available on special order 90CRI minimum versions on special order, subtract 15% lumens

## Packaging

Product is marked with SKU and lot information on non-LED side of module. Sold in groups of (1) unit(s) and packaged in ESD bags with SKU and lot information.

## Warranty

5-Year limited warranty in accordance with published warranty conditions. Product must be used with compatible components (modules, drivers, engines and/or accessories) and no maximum ratings (such as Ts) shall be exceeded during any operating conditions of the system. If product is used with other manufacturer's product, compatibility must be recognized in writing by Forzlux.

Forzlux owns the following United States patents of which may be applicable to the design or manufacture of this product: 6712486, 6578986, 6846093, 7114831, 7306353, 7102172, 7108396, 7329024, 7387406, 7582911, 7649327, 8926145, 8729810. Additional granted patents, patents pending and other IP protection rights may apply.

### MB Series Courtesy of Legendary Mike Bellos

