# High Density High Output Module Center Shaft Clearance Hole For Point Source Applications

#### Features and Benefits

- 2.17" square module is scalable up to 14 LEDs
- 0.406" diameter center hole for shaft clearance or mounting
- High efficacy family of modules replaces legacy light sources up to 175W incandescent and 32W CFL
- Patented intelligent thermal design uses metal core printed circuit board (MCPCB) for thermal transfer and simple installation
- Latest generation LED for high efficacy and color consistency
- Pre-wired pigtails are mechanically robust and reduce labor
- Includes mounting holes and 3M 468MP peel & stick tape for mechanical attachment
- Protective conformal (transparent) coating for exterior applications

#### **Compatible LED Drivers**

Recommended	Maximum	DC Input	Current to	Module	 350m	А
Typical DC input	: Voltage to	Module			 43.4	V

#### **Ratings and Performance Specifications**

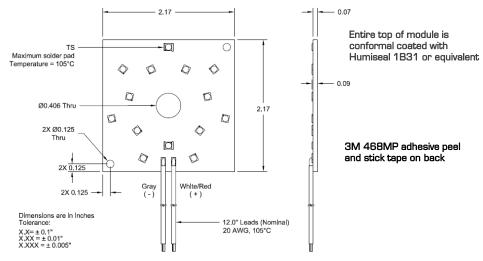
Nominal DC Power Consumption	See Table 1
Recommended Screw Installation Torque	75 inch ounces
Maximum Operating Range Ambient Temperature (Ta)	40 to +50°C
Maximum Solder Pad Temperature (Ts)	+105°C
Estimated Lumen Depreciation (TM-21)70% initial lumens (L70) @	100,000 hours
Nominal Weight	20 grams
Safety/Compliance 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 requires heatsinking at full power. 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	Nominal	
	Nominal		Light Output	Forward	Consumption	Efficacy	
	ССТ	Min.	@ 350mA	Voltage	@350mA	@ 350mA	
Part Number	(Kelvin)	CRI	(Lumens)	(VDC)	(WDC)	(DC LPW)	
BB14RC-27-80-01	2700	80	1,960	43.4	15.2	129	
BB14RC-30-80-01	3000	80	2,040	43.4	15.2	134	
BB14RC-35-80-01	3500	80	2,040	43.4	15.2	134	
BB14RC-40-80-01	4000	80	2,080	43.4	15.2	137	

## Options available

Other CCT and CRI may be available on special order. 90CRI minimum versions on special order, subtract 17% lumens.

## Packaging

Product is marked with SKU and lot information on non-LED side of module. Sold in groups of (20) 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.

