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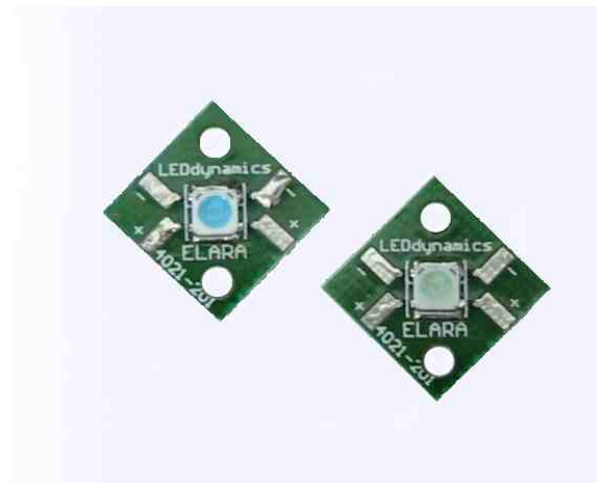


# 4021 Elara Moon

## High-Power LED Light Module

### Product Overview

The Elara Moon LED Module is just one of the new Moon Series LED Modules now available from LuxDrive. The Elara Moon combines the new Rigel® Series LED from Nichia with an ultra-thin PC Board mounting system to deliver High Luminous Intensity in a 0.5x x 0.5x package that is versatile and easy to use. The Elara's extremely low profile (0.060") and wide viewing angles makes it the ideal choice for back-lighting and other lighting applications where a low-profile light source is desired. The Elara Moon allows for mounting directly to the heat-sink surface without the use of an insulating layer. The Elara Moon is available with any of the Rigel Series LEDs.



Blue and Green Elara Moon LED Modules displaying the factory-dyed center for easy color identification.

### Specifications

#### Electrical Specifications

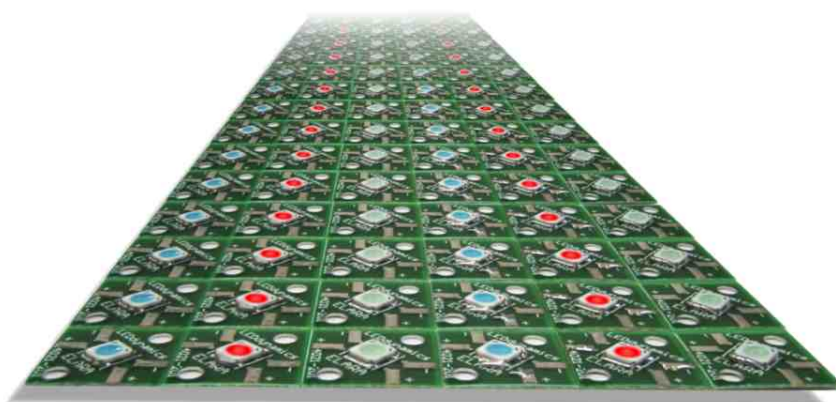
Forward Current ( $I_F$ ) . . . . .	180 mA
Pulse Forward Current** ( $I_{FP}$ ) . . . . .	350 mA
Reverse Voltage ( $V_R$ ) . . . . .	5 V
Power Dissipation ( $P_D$ ) . . . . .	0.81 W
Operating Temperature ( $T_{OPR}$ ) . . . . .	-30 to +85°C
Storage temperature. . . . .	-40 to +100°C
Recommended Operating Current ( $I_{OUT}$ ) . . . . .	150 mA

#### Features

- High luminous intensity
- Thin package
- Simple connection
- Superior life span and reliability
- Energy efficient

#### Typical Applications

- Solar & Landscape Lighting
- Architectural Lighting
- Track Lighting
- Automotive & Marine Lighting
- Portable Lighting & Flashlights
- Point of Purchase Lighting
- Desk & Reading Lamps
- Signal & marker Lighting
- Flashing & Strobe Lighting
- Cabinet & Display Case Lighting
- Sign & Channel Letters
- Much More...



**Custom arrays, PCBs (metal-core, FR4), drivers and control systems are available. Contact LuxDrive for more information.**

\* - Rigel is a registered trademark of Nichia Chemical Corporation  
 \*\* -  $I_{FP}$  Conditions: Pulse width <10ms, duty cycle <10%



## 4021 Elara Moon High-Power LED Light Module

### Part Number Identification Table

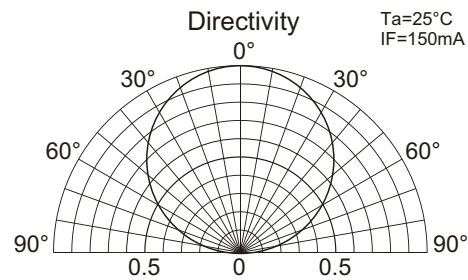
Part Number	I <sub>F</sub>	View Angle	Color	Nichia Part Number	V <sub>F</sub>		Light output
					typ	max	
04021-CW	150mA	120°	Cool White	NFSW036	4.0V	4.5V	9.0(cd)
04021-WW	150mA	115°	Warm White	NFSL036	4.0V	4.5V	7.8(cd)
04021-B	150mA	120°	Blue	NFSB036T	3.8V	4.3V	1.6(cd)
04021-G	150mA	120°	Green	NFSG036T	3.8V	4.3V	7.5(cd)

#### Heat Sinking

The Elara Moon LED module should be attached to additional heat sinking for proper thermal management. A metal plate (copper or aluminum) should be used to increase the area exposed to free air.

#### Optical Properties

Available in 120 degree view angle\*.

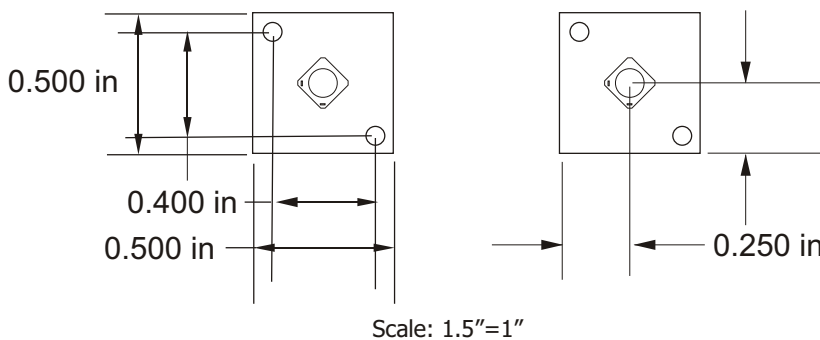


#### Physical Specifications

**Material:** The Elara Moon LED Light Module consists of the Nichia Rigel LED mounted to a printed circuit board.

**Mounting:** The Elara Moon LED Light Module is 0.50" square and has two holes for easy mounting. The mounting centers are shown in Figure 1.

**Center of Emissivity:** Figure 2 shows the center of emissivity for the LED.



**Figure 1.**  
Mounting centers

**Figure 2.**  
Center of emissivity

Scale: 1.5"=1"

#### Recommended Drivers

LuxDrive offers a line of drivers designed for use with High-Power LEDs. Several of these will provide the correct operating power for one or more Elara Moon modules. The choice of driver will depend upon number of LED modules to be driven and the input voltage source. See the full line of LuxDrive products on our web site at [www.LuxDrive.com](http://www.LuxDrive.com)