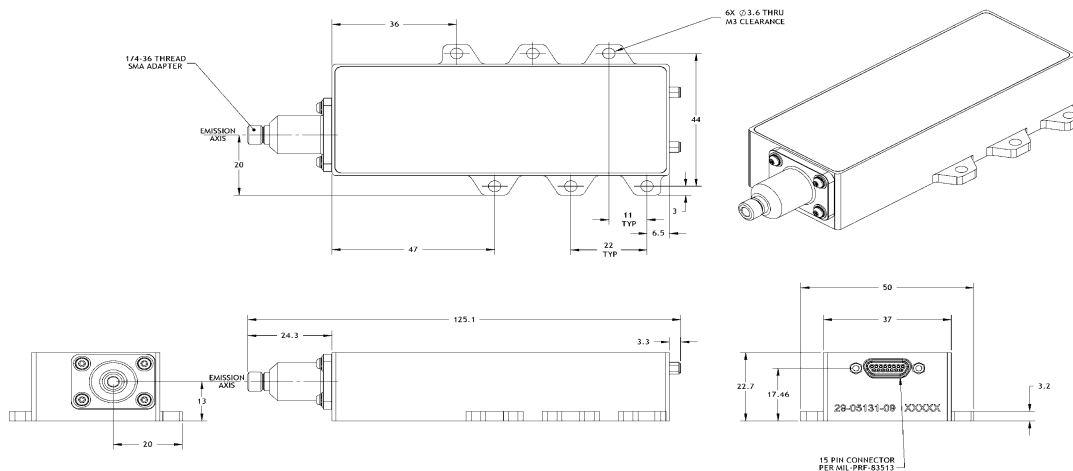


**Item Number**  
**Item Description**    **808nm 400um Fiber-coupled Module**

**Pilot Production Phase** <sup>2</sup>  
**ECCN: EAR99** <sup>3</sup>

|                                                 | Units   | Lower Spec | Typical                    | Upper Spec |
|-------------------------------------------------|---------|------------|----------------------------|------------|
| <b>Optical</b>                                  |         |            |                            |            |
| CW Output Power                                 | W       |            | 110                        |            |
| Centroid Wavelength                             | nm      | 805        | 808                        | 811        |
| Spectral Width (FWHM)                           | nm      |            |                            | 3          |
| Slope Efficiency                                | W / A   |            | 17.8                       |            |
| Beam Divergence from Fiber (90% PE)             | NA      |            | 0.17                       | 0.20       |
| Fiber Core / Clad Diameter                      | µm      |            | 400 / 480                  |            |
| Fiber NA / Index Type                           | -       |            | 0.22 / PowerCore™          |            |
| <b>Electrical</b>                               |         |            |                            |            |
| Electrical-to-Optical Efficiency                | %       | 47         | 51                         |            |
| Threshold Current                               | A       |            | 1.6                        |            |
| Operating Current                               | A       |            | 7.8                        | 8.6        |
| Operating Voltage                               | V       |            | 27.4                       | 30.1       |
| Series Resistance                               | Ω       |            | 0.3                        |            |
| <b>Mechanical</b>                               |         |            |                            |            |
| Mass <sup>7</sup>                               | g       |            | 190                        |            |
| Fiber Length                                    | m       | 1.9        | 2.0                        | 2.1        |
| Fiber Bend Radius (Active / Storage)            | mm      |            | 75 / 65                    |            |
| Fiber Jacketing                                 | -       |            | Stainless Steel Squarelock |            |
| Fiber Termination                               | -       |            | SMA                        |            |
| <b>Thermal</b>                                  |         |            |                            |            |
| Thermal Resistance <sup>4</sup>                 | °C / W  |            | 0.17                       |            |
| Waste Heat                                      | W       |            | 103                        |            |
| Operating Housing Temperature <sup>6</sup>      | °C      |            | +25                        |            |
| Wavelength Temperature Coefficient <sup>5</sup> | nm / °C |            | 0.28                       |            |

### Outline Drawing



### Notes

- <sup>1</sup>Production specifications shown are for beginning of life performance, end of life operating current (lop) is 120% beginning of life lop
- <sup>2</sup>Current phase within nLIGHT's NPI (New Production Introduction) process
- <sup>3</sup>Export Control Classification Number (ECCN) as defined by the Export Administration Regulations (EAR)
- <sup>4</sup>Thermal resistance is the diode junction temperature shift per incremental Watt of heat load
- <sup>5</sup>The wavelength temperature coefficient is the wavelength shift per °C change at the diode junction
- <sup>6</sup>Operating temperature defined by the package housing. Acceptable operating range is 20 - 35C, but performance may vary
- <sup>7</sup>Does not include mass of fiber

This product is not certified in accordance with IEC 60825-1 or 21CFR1040.10/21CFR1040.11 and is solely intended to be integrated into a laser product certified by the Purchaser. The Purchaser acknowledges that their product (incorporating the nLIGHT laser product) must comply with the applicable regulations before it can be sold.



**Notice**  
nLIGHT continually improves its products to provide customers with outstanding quality and reliability, therefore may change certain specifications and product descriptions at any time, without notice. Additionally, nLIGHT offers a limited warranty to ensure customer satisfaction. For complete details, please contact an nLIGHT sales representative.



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