

# LUMILEDS LUXEON IR Domed Starboards

Industry Leading High Powered LED Starboards

# Data Sheet

Version 1.0

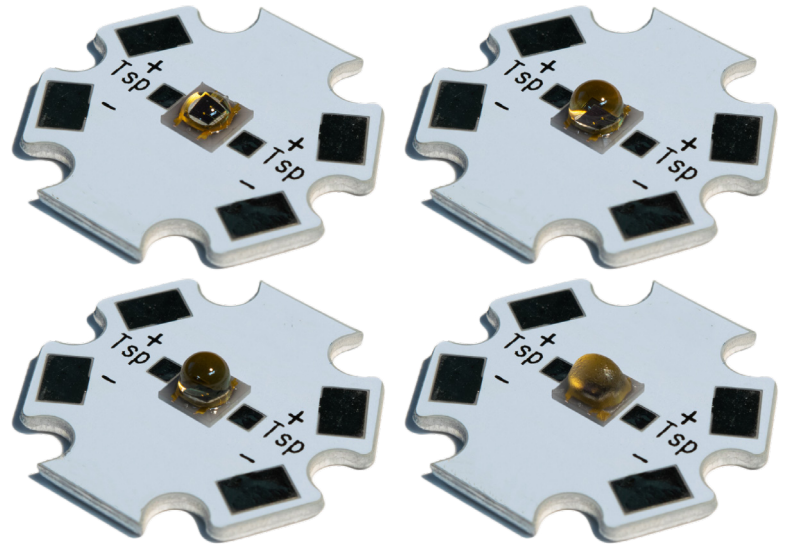
## Lean & Fast. Made Smarter.

**Superior Performance** - Stay current with the highest intensity LEDs

**Design Faster** - Use industry standard starboards to shorten development time

**Maximum Flexibility** - Design to your exact specifications using the full spectrum of NewEnergy starboards

**Rapid Innovation** - Work with NewEnergy on your custom solution



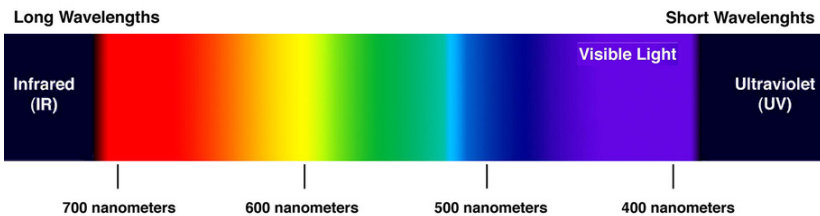
## Primary Applications



Surveillance Systems  
License Plate Scanning  
Automotive Sensing  
Machine Vision  
Night Vision  
Eye Tracking Systems

## Superior Performance with Flexible Options

- Multiple infrared wavelength options
- Choose the proper beam angle for your application
- Prototype faster, test multiple options

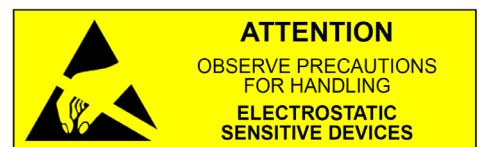


## Custom Solutions

NewEnergy operates facilities globally with ISO certifications for the LED lighting, automotive and medical industries. Our North Carolina based office provides quick engineering & sales support with an R&D lab for prototype development and custom solutions. Our in-house global manufacturing capabilities allow for both building in the United States as well as overseas at scale.

## About NewEnergy

NewEnergy accelerates the adoption of LED technology through simple, modular products and custom designs. Through 30 years of experience, state of the art manufacturing, full traceability and advanced quality controls, NewEnergy offers leading solid state lighting components, modules and custom solutions. NewEnergy customers get to market faster, with less resources, at lower costs. Visit [new-energyllc.com](http://new-energyllc.com) for more information.



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## Product Selection Guide

Part Number	Description	Beam Angle (°)	Typical Peak Wavelength	Typical Flux (mW)	Typical Forward Voltage (Vf)	Typical Wattage (W)
LST1-01H01-IR01-01	Starboard, LUXEON IR Domed, Infrared, 850nm, 60°	60	850 nm	1350 mW	3.2	3.2
LST1-01H02-IR02-01	Starboard, LUXEON IR Domed, Infrared, 850nm, 90°	90	850 nm	1350 mW	3.2	3.2
LST1-01H03-IR03-01	Starboard, LUXEON IR Domed, Infrared, 850nm, 150°	150	850 nm	1350 mW	3.2	3.2
LST1-01H04-IR04-01	Starboard, LUXEON IR Domed, Infrared, 850nm, Asymmetric	95 x 58	850 nm	1350 mW	3.2	3.2
LST1-01H01-IR05-01	Starboard, LUXEON IR Domed, Infrared, 940nm, 60°	60	940 nm	1450 mW	2.9	2.9
LST1-01H02-IR06-01	Starboard, LUXEON IR Domed, Infrared, 940nm, 90°	90	940 nm	1450 mW	2.9	2.9
LST1-01H03-IR07-01	Starboard, LUXEON IR Domed, Infrared, 940nm, 150°	150	940 nm	1450 mW	2.9	2.9
LST1-01H04-IR08-01	Starboard, LUXEON IR Domed, Infrared, 940nm, Asymmetric	95 x 58	940 nm	1450 mW	2.9	2.9

<sup>(1)</sup>Flux, wavelength, and wattage values specified at 1.0A, T<sub>j</sub> 25°C

All values shown above are typical.

Do not look into the light that is emitting from these LEDs as it is harmful to the human eye.

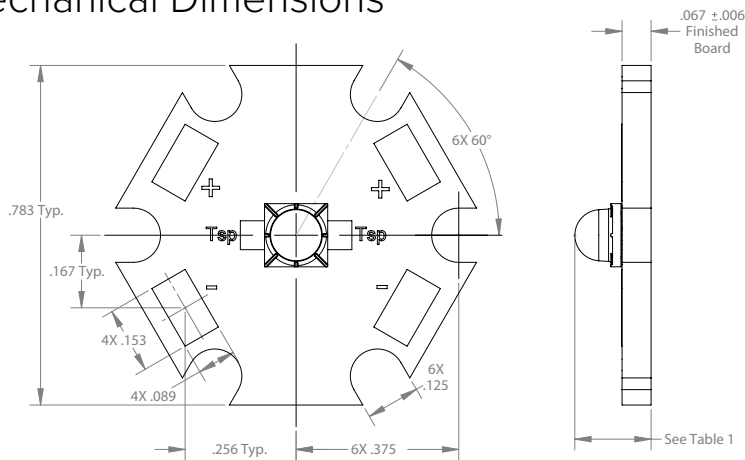
Eye injury may result. Use skin and eye protection as necessary.

Other beam angles and colors available upon request.

## Maximum Ratings

Part Number	DC Current (A)	Tsp Temp (°C)	Power (W)
LST1-01H01-IR01-01, LST1-01H02-IR02-01, LST1-01H03-IR03-01, LST1-01H04-IR04-01	1.0	105	3.7
LST1-01H01-IR05-01, LST1-01H02-IR06-01, LST1-01H03-IR07-01, LST1-01H04-IR08-01	1.0	105	3.4

## Mechanical Dimensions



LED Beam Angle	Total PCBA Height
60°	.183
90°	.176
150°	.138
95x58°	.180