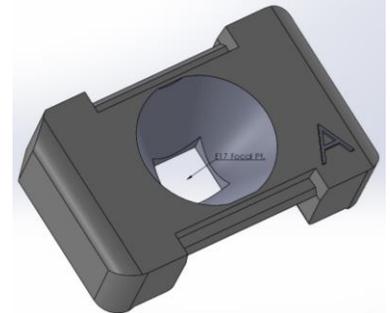


CoreLED P/N 11001 (Spot)

- 4H x 4V Square
- Compatible with following LED products
 - Osram Oslon 1010
 - Nichia E17
 - Samsung 101B
 - Other LED packages may be compatible (Contact CoreLed Engineering for requests)



Product Description:

The SMR product family is a series of vacuum metallized high temperature polymer mini-reflectors that attach directly to PCB using standard reflow. These components achieve high light collection efficiency, a variety of engineered beam patterns, and are supplied for high volume pick and place electronics assembly.

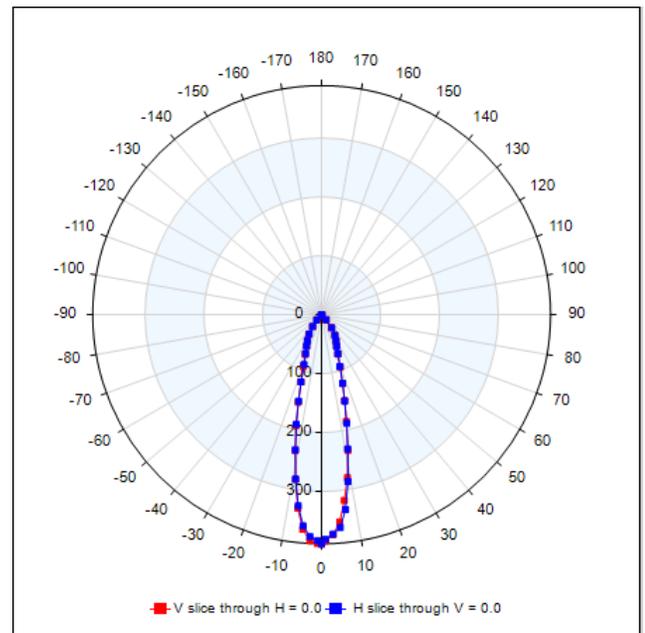
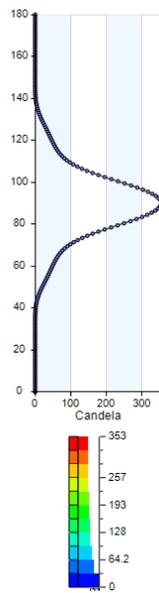
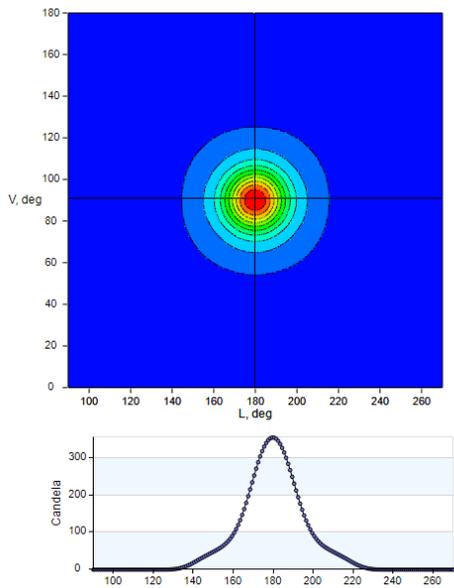
Key Features:

- Optical reflector reflow mounted at the same time as LED assembly
- Supplied in tape and reel
- Increased control of light output
- Precision alignment (within $\pm 0.1\text{mm}$)
- Family of optical beam patterns that will work using IR reflow
- Reflow solder lead frame integrated into reflector assembly
- Standard pick and place equipment
- Manufactured without the need for additional components to attach the optics

Emitted Pattern Profile

Nichia E17 (Simulated)

IES NEMA Type	4H x 4V
Maximum Candela	389
Maximum Candela Angle	-1.0H 0.0V
Horizontal Beam Angle (50%)	25.6
Vertical Beam Angle (50%)	25.4
Horizontal Field Angle (10%)	67.1
Vertical Field Angle (10%)	66.7
Total Rated Lamp Lumens	150
Total Efficiency	84.95%

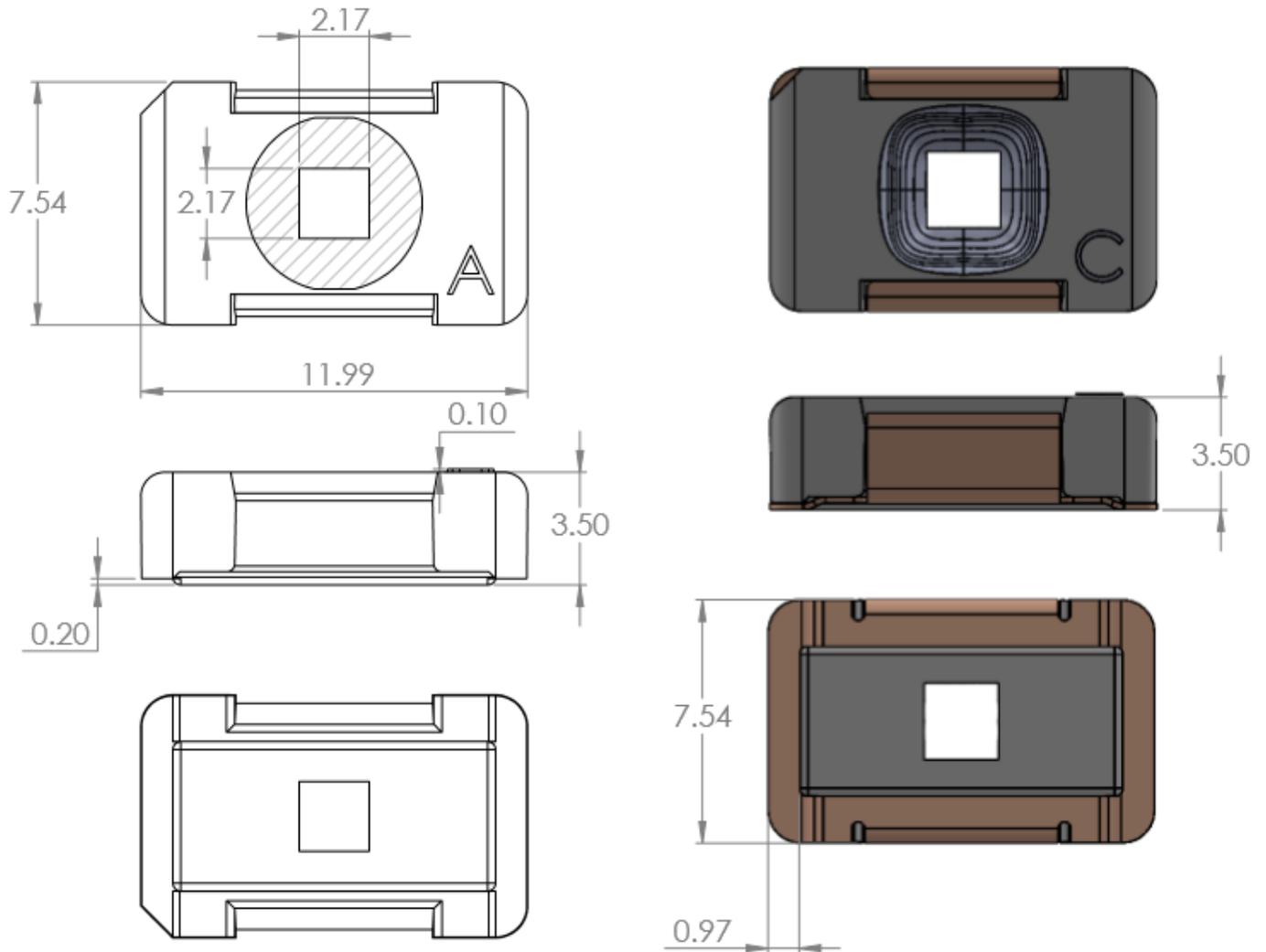


FLOOD/CANDELA VERSUS ANGLE

25 DEGREE FWHM

IES files and Raytrace models are available upon request from CoreLed Engineering.

Mechanical Profile

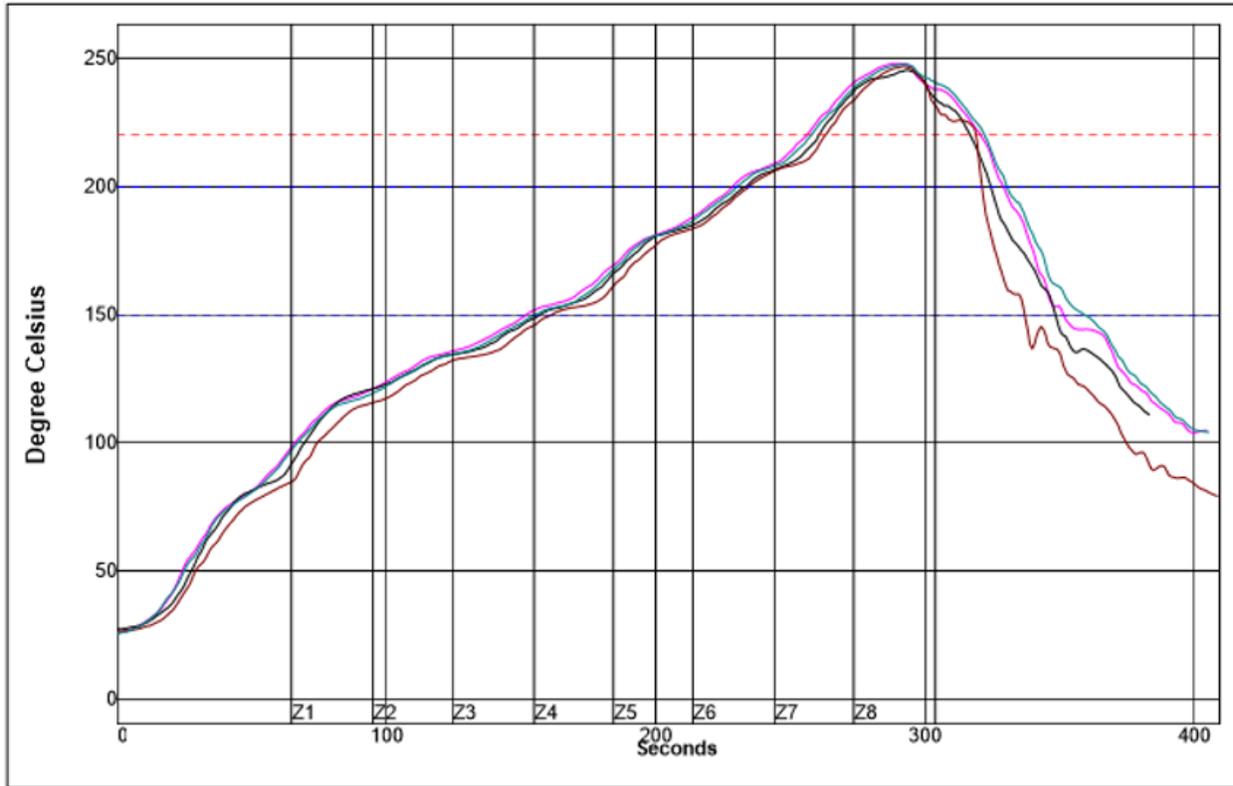


Mechanical design features without solder clip

Mechanical design features with solder clip (please note that dimensions are same for every SMR 12 x 7.5 design in above pictures.

CAD files available upon request from CoreLed Engineering

Reflow Profile

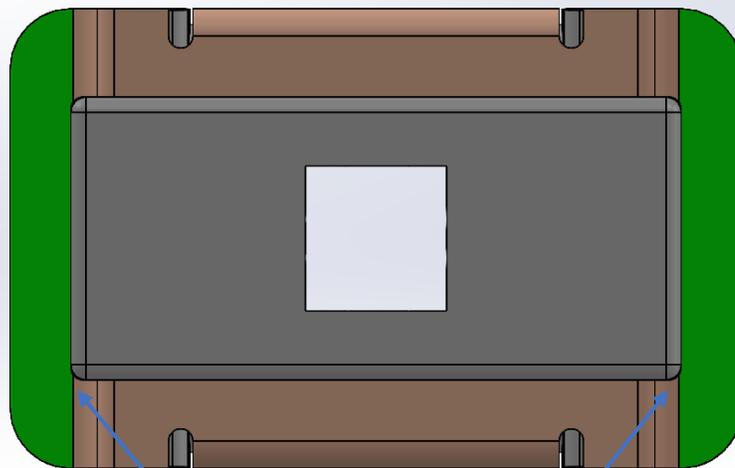
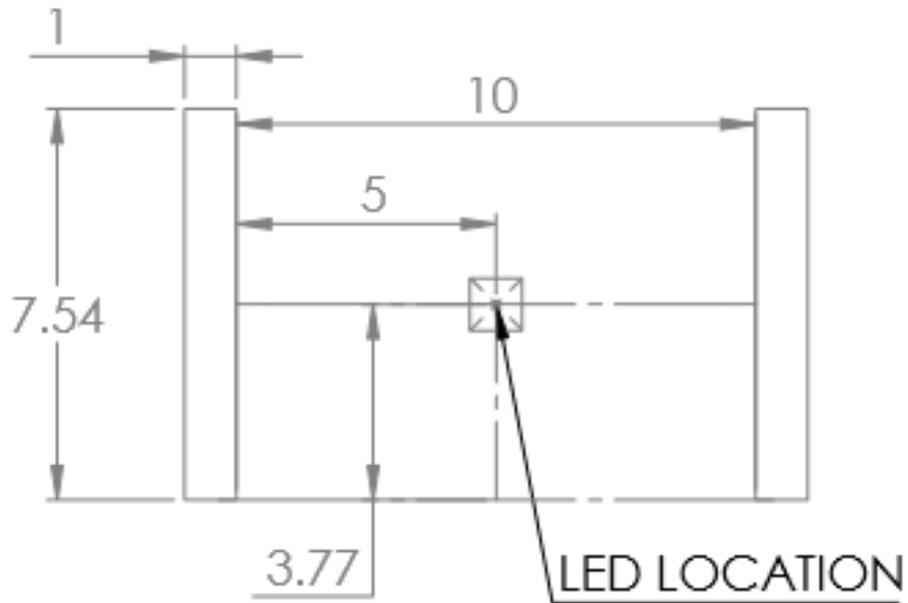


Setpoints (Degree Celsius)								
Zone	1	2	3	4	5	6	7	8
Top	125	148	152	173	210	235	268	257
Bottom	125	148	152	173	210	235	268	257
Conveyor Speed	50.0 cm/min							

Example Reflow profile used for testing of SMR units by CoreLed

Solder Pad drawing

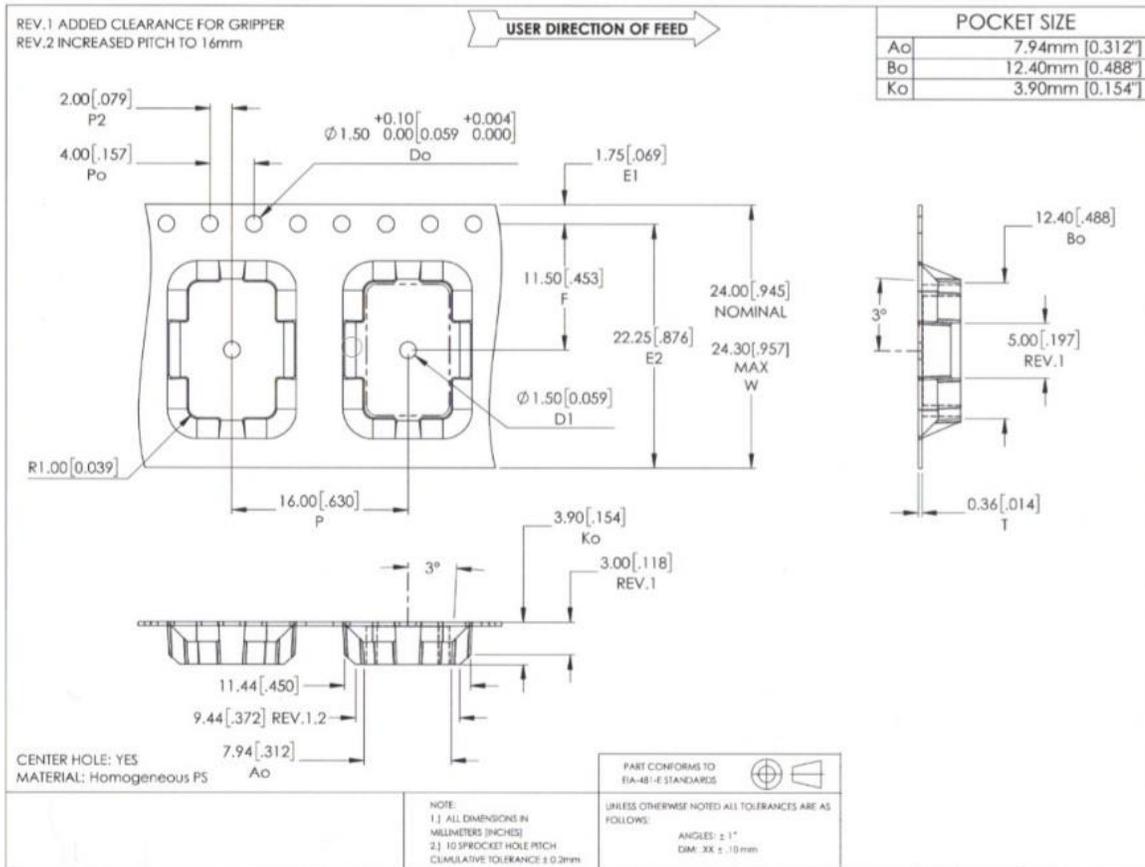
Dimensions are in mm



Solder area denoted in green

Matt SN finish

Packaging



Packaging information for tape and reel delivery.

