

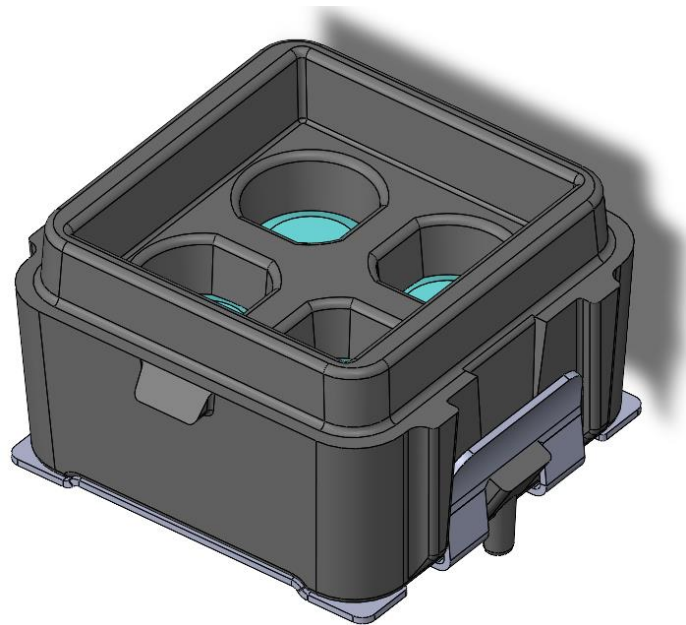
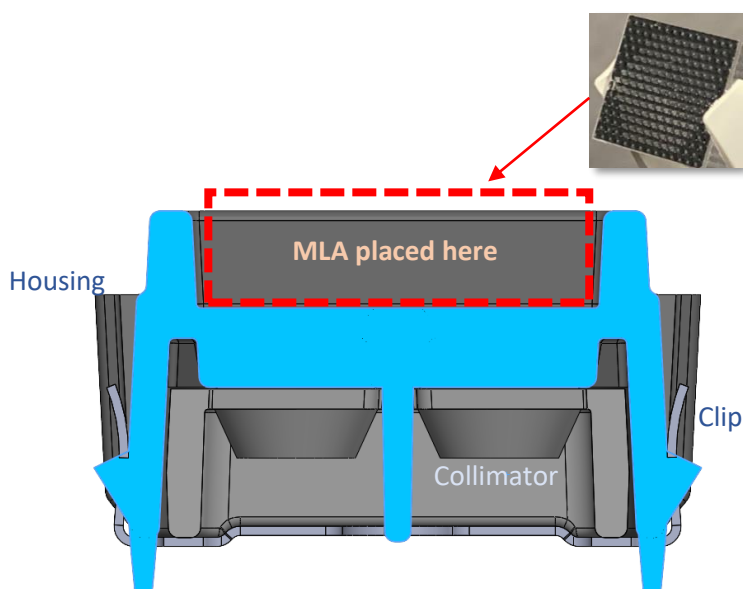
CoreLED P/N 13020

Product Description:

This surface mountable submodule is a Quad Collimating Assembly containing 3 distinct components. This submodule is comprised of a metal clip for PCB attachment, a collimating 2x2 lens array and a housing. It may be used with a Micro-Lens Array (MLA) which is separate component, not included. A separate cap to retain the MLA is also available as a separate component.

Key Features:

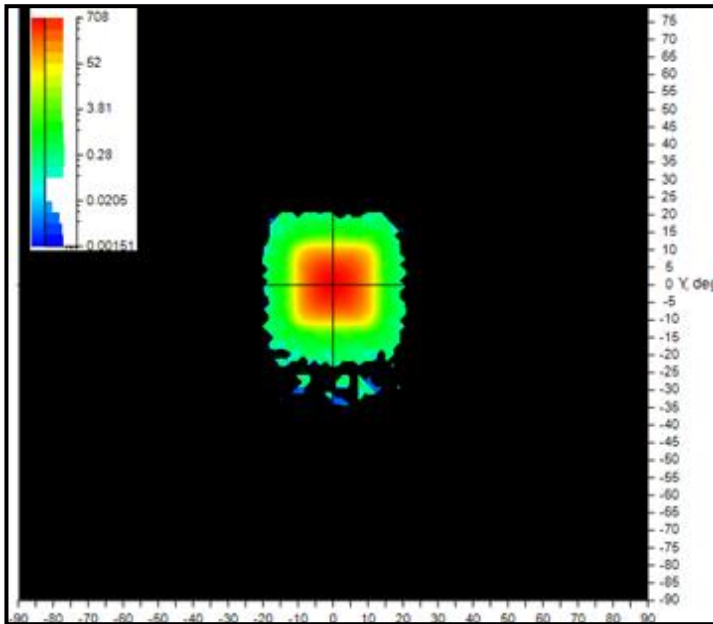
- Collimating optics designed to work with Osram Oslon Boost HM
- Other LEDs can be analyzed for fit & performance upon request from CoreLED
- Supplied in tape and reel
- Precision alignment (within $\pm 0.2\text{mm}$)
- Standard pick and place equipment



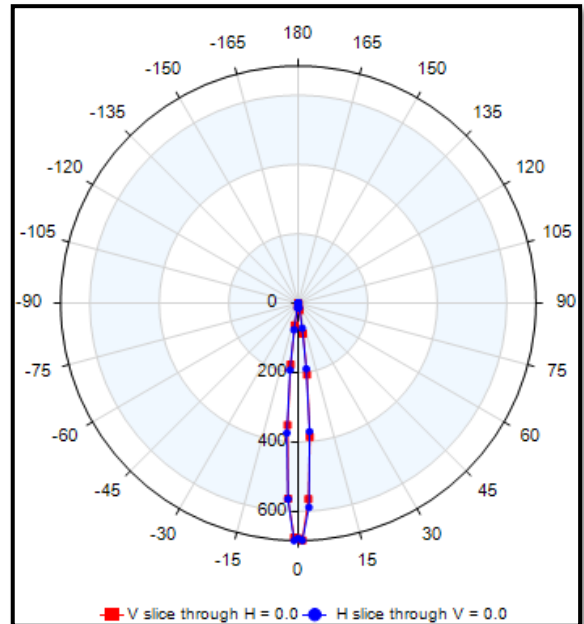
Emitted Pattern Profile

Oslon Boost HM KW CULPM1.TG

CHARACTERISTICS	
IES NEMA Type	2H x 2V
Maximum Candela	684
Maximum Candela Angle	0.0H -1.0V
Horizontal Beam Angle (50%)	10.6
Vertical Beam Angle (50%)	10.7
Horizontal Field Angle (10%)	18.5
Vertical Field Angle (10%)	18.4
Total Rated Lamp Lumens	100
Total Efficiency	28.25%



Angular Intensity (cd)



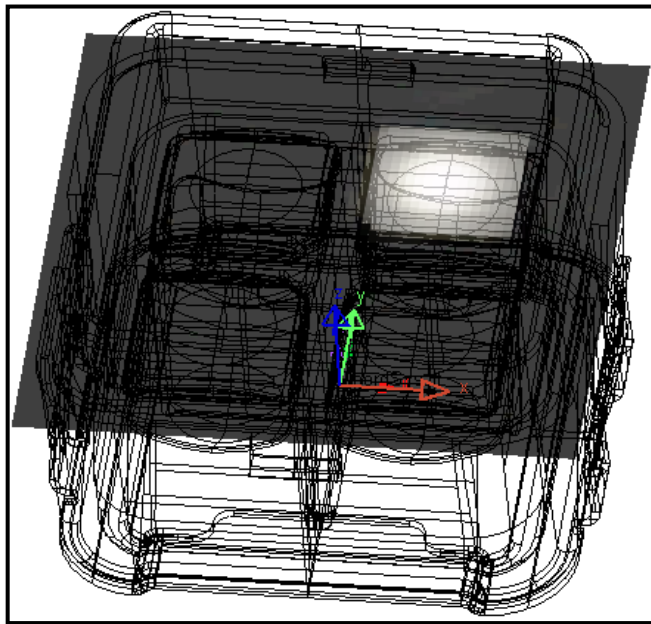
Intensity (cd)

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

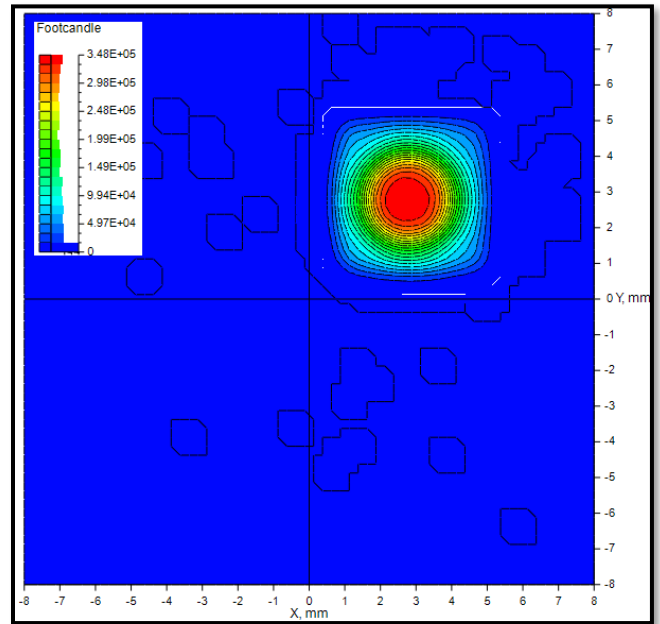
Simulation

OSRAM OSOLON Boost HM with surface mount array mask and lens with 100 lumens

CHARACTERISTICS	
IES NEMA Type	1H x 1V
Maximum Candela	879
Maximum Candela Angle	0.0H 0.0V
Horizontal Beam Angle (50%)	9.5
Vertical Beam Angle (50%)	9.4
Horizontal Field Angle (10%)	17.4
Vertical Field Angle (10%)	17.4
Total Rated Lamp Lumens	100



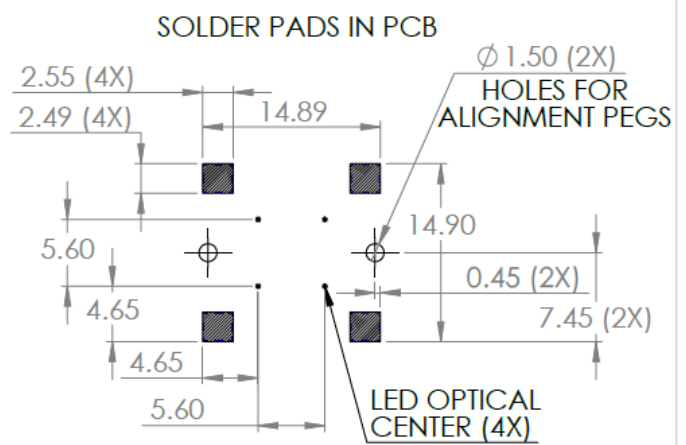
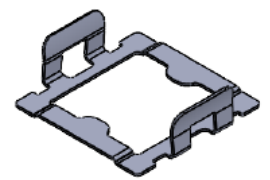
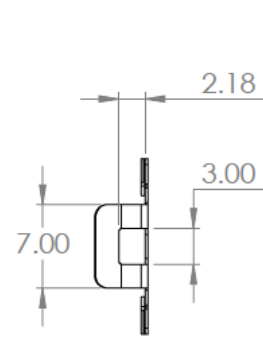
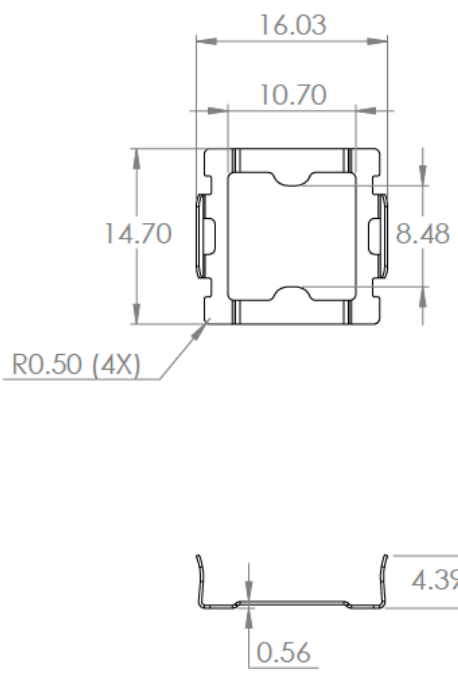
Illuminance on a plane (7mm away)



Linear Illuminance on a plane (7mm away)

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

Mechanical Profile: Collimating Assembly Solder Clip



- NOTES:**
1. MATERIAL: 0.254mm (0.010") THICK 510 H08 TEMPER PHOSPHOR BRONZE
 2. PLATING: 5.0 MICRONS MINIMUM SOLDERABLE Sn OVER Cu FLASH, PRE PLATED
 3. ALL TOLERANCES +/- 0.25 mm AND +/- 1 DEGREE UNLESS OTHERWISE SPECIFIED

PROPRIETARY AND CONFIDENTIAL

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NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MILLIMETERS	B.WELLS	02/26/26
TOLERANCES:		
FRACTIONAL ±	CHECKED	
ANGULAR: MACH ± BEND ±	ENG APPR.	
TWO PLACE DECIMAL ±	MFG APPR.	
THREE PLACE DECIMAL ±	Q.A.	
INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:	
MATERIAL		
510 H08 TEMPER PHOSPHOR BRONZE PRE TIN PLATED		
FINISH		
DO NOT SCALE DRAWING		

CoreLed Systems, LLC		
TITLE:		
COLLIMATING ASSEMBLY SOLDER CLIP		
SIZE	DWG. NO.	REV
A	P/N: 13010	B.1
SCALE: 2:1	WEIGHT:	SHEET 1 OF 1

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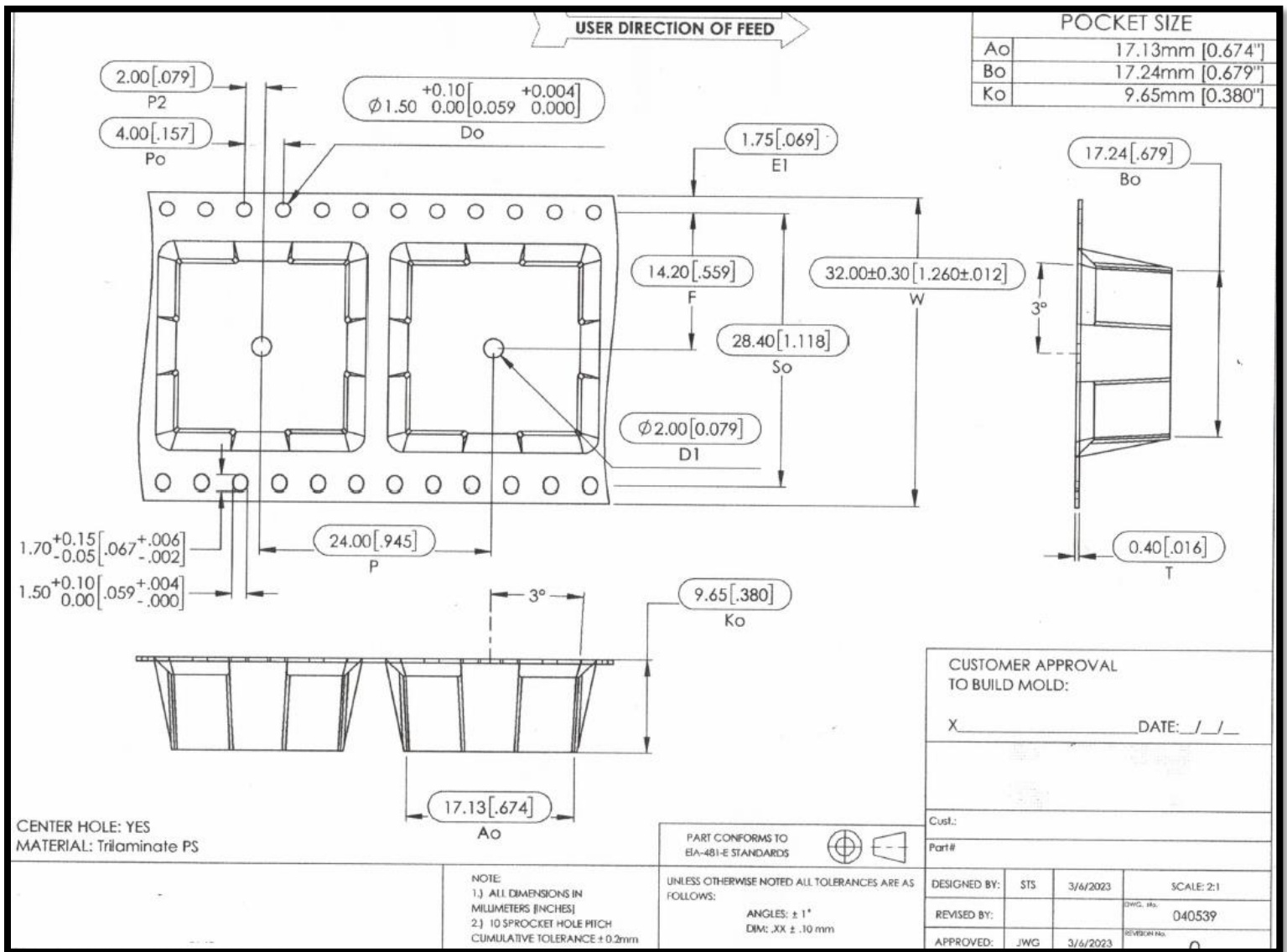
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CAD files available upon request from CoreLED Engineering

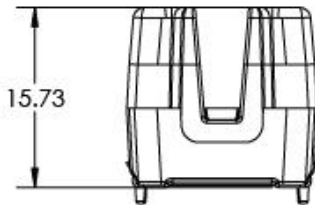
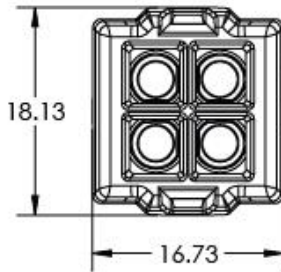
Packaging:

Individually packaged & delivered in tape and reel

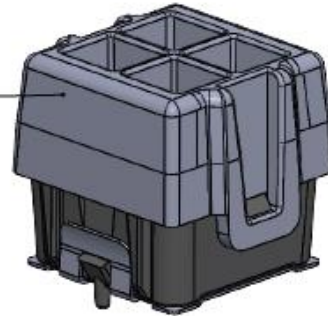
Preliminary Design



Appendix 1: Tall Cap



TALL CAP
P/N: 13014



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	CoreLed Systems, LLC
DIMENSIONS ARE IN MILLIMETERS		B.WELLS	2/26/26	
TOLERANCES:		DRAWN		TITLE:
FRACTIONAL ±		CHECKED		QUAD COLLIMATING
ANGULAR: MACH ± BEND ±		ENG APPR.		ASSEMBLY
TWO PLACE DECIMAL ±		MFG APPR.		SIZE DWG. NO. REV
THREE PLACE DECIMAL ±		G.A.		P/N: 13020 B.1
INTERPRET GEOMETRIC TOLERANCING PER:	MATERIAL	COMMENTS:		SCALE: 2:1 WEIGHT: SHEET 2 OF 2
FINISH				
APPLICATION	DO NOT SCALE DRAWING			

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NEXT ASSY	USED ON
APPLICATION	

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