HEATRON
LED INTEGRATION

ASCENDIA

High Brightness 8" Round LED Module

Overview

Delivering up to 7400 lumens from a High Brightness 8" Round LED Module, Ascendia offers OEMs a low profile light module that easily integrates into cans, cylinders, pendants, low-bay, recessed and surface mount down light fixtures. Available in three color temperatures and three beam angles, the LED Module provides bright, uniform illumination for mounting heights of 10 feet or higher, providing a maintenance free Solid State Lighting alternative to metal halide and HID sources.

Engineered for effortless integration into OEM light fixtures, the 8" Round LED Module's low profile housing measures less than 3.6" in total height and includes side or top wiring port locations to accommodate various types of fixtures. The low profile light module is available in both the 20° and 43° optics. The 70° beam angle has a spun reflector which extends the total light module height to 8.6".

Designed specifically for Lighting Manufacturers, the Ascendia LED Module provides multiple mounting options; these include three tapped mounting holes on top and three additional mounting holes on the flange of the enclosure for seamless integration into any type of fixture. Heatron LED offers mounting bracket accessories for top mount, gimbal mount and side mount options. Mounting accessories sold separately.

Transforming Your Vision into Higher Performance Solutions

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High Brightness 8" Round LED Module

LED Module

1. Integrated die cast aluminum heat sink
2. LED board
3. Optical lens holder for 20° and 43° module
4. Aluminum spun reflector for 70° module only

Indoor Applications

- Recessed
- Surface Mount
- Can
- Pendant
- Cylinder
- Low Bay

Optical Characteristics			
Color Temperature (Kelvin)	**CRI Minimum**	**Lumen[1] Values**	**Beam Angle FWHM**
3000	80	6400	20°
3000	80	6400	43°
3000	80	5100	70°
3500	80	6400	20°
3500	80	6400	43°
3500	80	5100	70°
4000	80	7400	20°
4000	80	7400	43°
4000	80	6100	70°

[1] *Nominal Values*

Electrical Characteristics Ta = 25°C		
Parameter	**Nominal**	**Maximum**
Forward Voltage (Volts DC)[2]	50	60
Forward Current (A)	2.1	2.1
Power Consumption Watts (W)[2,3]	105	120
Efficacy without Optical Diffuser	77	
Efficacy with Optical Diffuser	62	

[2] *Due to variances in LEDs, operate with a 2.1A constant current LED driver capable of operating over a 48V to 60V range*
[3] *Driver losses not included. Actual wattage may differ by +/-10%. Driver not supplied by Heatron.*

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Key Features

- Light intensity exceeding a 150 Watt metal halide or HPS lamp
- Luminous efficacy of up to 77 lm/W
- Available in Color Temperatures: 3000 K, 3500 K and 4000 K
- Mounting features on top and side for easy integration into OEM light fixtures
- Optimized thermal management for maximum performance, long life and reliability
- 5 year warranty
- UL 8750 class 1 recognition pending
- Environmentally green: Mercury and UV Free, RoHS compliant

Product Features

Mounting

- Top mounting via 3 x 8/32 tapped holes
- Flange mounting via 3 x 10/24 holes
- Top and flange mounting brackets sold separately

Wiring

- Top exit wiring port supplied with 15" of armored aluminum BX cable
- Side exit wiring port supplied with 18" of jacketed 18-gage wire and a cable gland strain relief connector

Heat Sink

- Rugged construction: Integrated die cast aluminum heat sink efficiently removes heat from the LED for reliable operation in a multitude of applications

Weight

- 4.11 lbs. (1.86 kg)

Optical

- Impact resistant diffuser and aluminum spun reflector for 70° module
- Individual TIR optics used for 20° and 43° beam angles

Testing

- Tested in accordance with IESNA LM-79 by an independent laboratory
- UL 8750 class 1 recognition pending

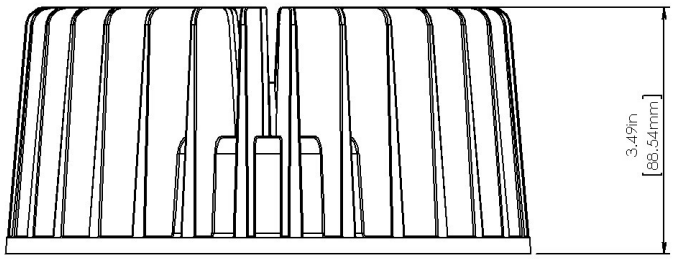
Lifetime

- Estimated Lumen Depreciation (LM80 standard) 70% of initial lumens (L70) at 50,000 hours

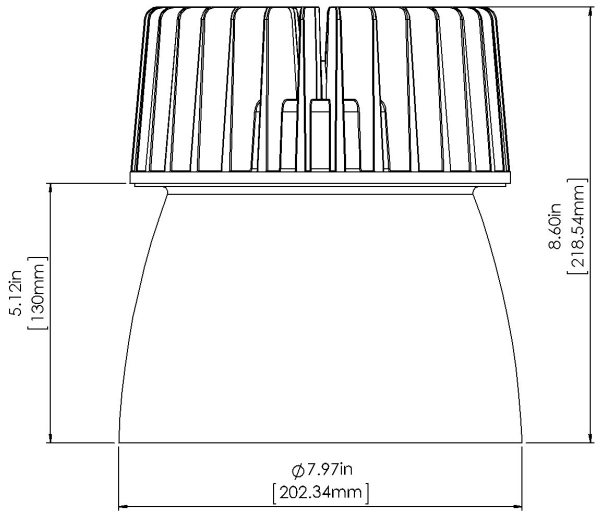
Warranty

- 5 year limited warranty

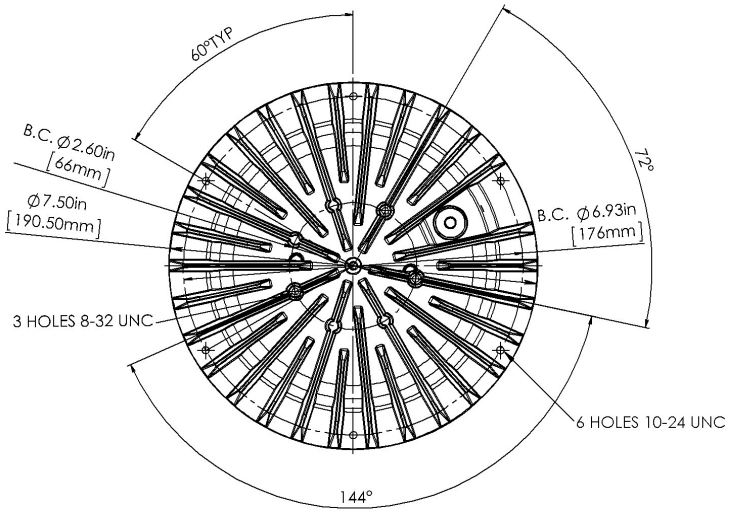
Side View 20 & 43 Degree Model

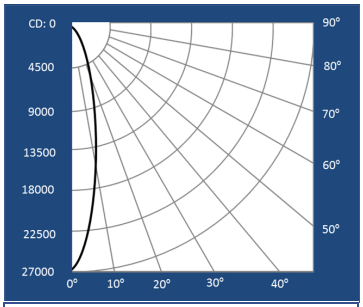


Side View 70 Degree Spun Reflector



Top View



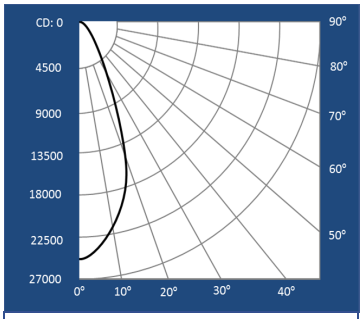


Initial FC

Mounting Height	Center Beam	Beam Diameter
8.0'	416	3.3
10.0'	266	4.1
12.0'	185	4.8
14.0'	136	5.8
16.0'	104	6.6

INPUT WATTS: 96, DELIVERED LUMENS 7411, LM/W= 77

	Avg.	Lumens per Zone	Zone	Lumens	% of Lamp	RC RW RCR	80% 50%	80% 30%	80% 0%	70% 50%	70% 30%	70% 0%	50% 50%	50% 30%	50% 20%
0	26627		0° - 30°	5821	78.5	0	119	119	119	116	116	100	111	111	111
5	23282	1950	0° - 40°	6472	87.3	1	114	109	106	109	107	94	105	103	102
15	9284	2568	0° - 60°	7164	96.7	2	108	100	97	102	99	89	99	96	94
25	2745	1303	0° - 90°	7411	100.0	3	104	93	89	96	92	84	94	90	87
35	1018	652	90° - 180°	0.0	0.0	4	99	87	83	91	87	80	89	85	82
45	523	410	0° - 180°	7411	100.0	5	95	82	79	87	82	76	85	81	78
55	313	282				6	91	78	74	83	78	73	81	77	74
65	171	171				7	88	75	71	79	74	69	78	74	70
75	64	69				8	85	71	68	76	71	67	75	71	67
85	5	8				9	82	68	65	73	68	64	72	68	65
90	0					10	79	66	63	70	66	62	70	65	62

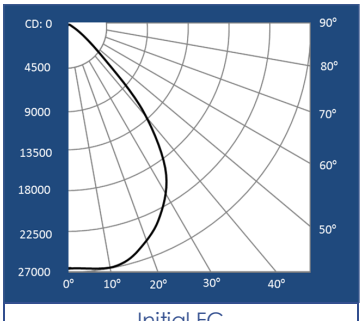


Initial FC

Mounting Height	Center Beam	Beam Diameter
8.0'	157	6.3
10.0'	100	8.0
12.0'	70	9.6
14.0'	51	11.2
16.0'	39	12.7

INPUT WATTS: 101, DELIVERED LUMENS 6485, LM/W= 64

	Avg.	Lumens per Zone	Zone	Lumens	% of Lamp	RC RW RCR	80% 50%	80% 30%	80% 0%	70% 50%	70% 30%	70% 0%	50% 50%	50% 30%	50% 20%
0	10025		0° - 30°	4655	71.8	0	119	119	119	116	116	100	111	111	111
5	9553	880	0° - 40°	5550	85.6	1	110	108	105	108	106	93	104	102	100
15	7559	2040	0° - 60°	6256	96.5	2	102	98	94	100	97	86	97	94	91
25	3826	1734	0° - 90°	6485	100.0	3	95	90	86	94	89	80	91	87	84
35	1411	895	90° - 180°	0.0	0.0	4	89	83	79	88	82	75	85	81	77
45	576	450	0° - 180°	6485	100.0	5	83	77	73	82	77	70	80	76	72
55	280	256				6	78	72	68	77	72	66	76	71	67
65	156	156				7	74	68	64	73	68	62	72	67	63
75	62	67				8	70	64	60	69	64	59	68	63	59
85	4	7				9	66	60	57	66	60	56	65	60	56
90	0					10	63	57	54	63	57	53	62	57	53



Initial FC

Mounting Height	Center Beam	Beam Diameter
8.0'	66	13.3
10.0'	42	16.6
12.0'	29	19.9
14.0'	21	23.3
16.0'	16	26.6

INPUT WATTS: 101, DELIVERED LUMENS 6100, LM/W= 60

	Avg.	Lumens per Zone	Zone	Lumens	% of Lamp	RC RW RCR	80% 50%	80% 30%	80% 0%	70% 50%	70% 30%	70% 0%	50% 50%	50% 30%	50% 20%
0	4196		0° - 30°	3289	53.9	0	119	119	119	116	116	100	111	111	111
5	4236	407	0° - 40°	5049	82.8	1	110	107	105	108	105	93	104	102	100
15	4198.2	1182	0° - 60°	6077	99.6	2	101	97	93	99	95	85	96	93	90
25	3709	1700	0° - 90°	6101	100	3	93	88	83	92	87	78	89	85	81
35	2855	1759	90° - 180°	0	0	4	86	80	75	85	79	71	82	77	74
45	1319.8	949	0° - 180°	6101	100	5	79	73	68	78	72	65	76	71	67
55	51.4	80				6	73	67	62	73	66	60	71	65	61
65	14.6	16				7	68	61	57	67	61	55	66	60	56
75	6	6				8	63	57	52	63	56	51	62	56	52
85	2	2				9	59	52	48	58	52	47	57	52	48
90	0					10	55	49	44	55	48	44	54	48	44

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Recommended Operating Conditions			
Parameter	**Minimum**	**Typical**	**Maximum**
Operating Current (A)	- -	2.1	2.1
Ambient Operating Temperature °C	-25°	25°	35°
Case Temperature °C (Tc)			80°
Storage Temperature °C	-40°		+50°

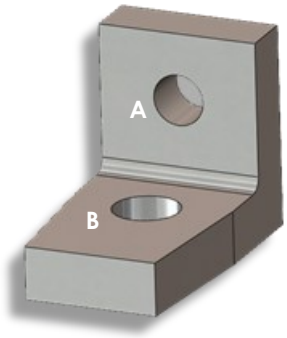
*Operation beyond recommended maximum levels may result in a reduction of product performance and lifetime.

Mounting Accessories

Side Mounting L Bracket

Part number H6164

- Aluminum bracket attaches to housing flange for integration into lighting fixtures
- 0.59" length; 0.79" height
- Mounting hole A: 10-24UNC; B: ø 0.20"
- 2 brackets per kit



Top Mounting 3 Leg Bracket

Part number H6165

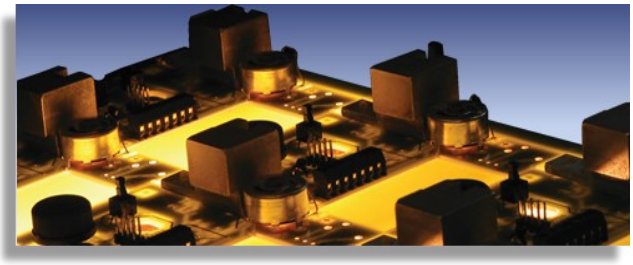
- Aluminum bracket attaches to top of housing for integration into pendant and cylinder style fixtures
- 0.98" height; ø 0.79" diameter on center hole
- 3 Mounting holes ø 0.19"
- 1 bracket per kit

Ordering Information

Example: JDHT8R-A0230-8020-S00-NSA

Internal	Series	Internal	Color Temperature	Minimum CRI	Beam Angle	Wiring Port Location	Optics and Diffuser	Internal
JDHT	**8R**	**A02**	30 - 3000 K 35 - 3500 K 40 - 4000 K	80 80 80	20 degree 43 degree 70 degree	T Top S Side	00 - No diffuser (1) 01 - Diffuser (2) 02 - 70° without reflector (3) *See ordering notes*	**NSA**

Ordering Notes: *(1) 20° and 43° are standard without diffuser and reflector (2) 70° is standard with diffuser and spun reflector (3) The 70° LED module may be ordered without a reflector by using optics code – 02 Photometric for 70° LED module are guaranteed only when ordered with the reflector*



Shown with optional accessories

About Heatron LED Integration

Heatron LED Integration, a leader in LED lighting solutions, helps OEMs reduce costs and speed time to market while ensuring superior quality and performance. Heatron LED Integration leverages the engineering disciplines of optical, electrical and mechanical design, with expertise in thermal management.

Offering various levels of integration ranging from design and manufacture of component level LED light engines to turnkey lighting solutions, Heatron designs for a broad range of uses, including indoor, outdoor, commercial, industrial, healthcare and transportation lighting applications.

Heatron, Inc. – *Transforming Your Vision into Higher Performance Solutions.* For more information about Heatron LED Integration, its products, services and manufacturing, visit www.heatron.com.

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