

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P730787

Luminaire Tested: **HBLED-LD5-24SE-W-FLI-UNV-L835**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26703)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24SE-W-FLI-UNV-L835
Description: 24000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21084.0 lumens
Efficiency: N/A
Efficacy: 140.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

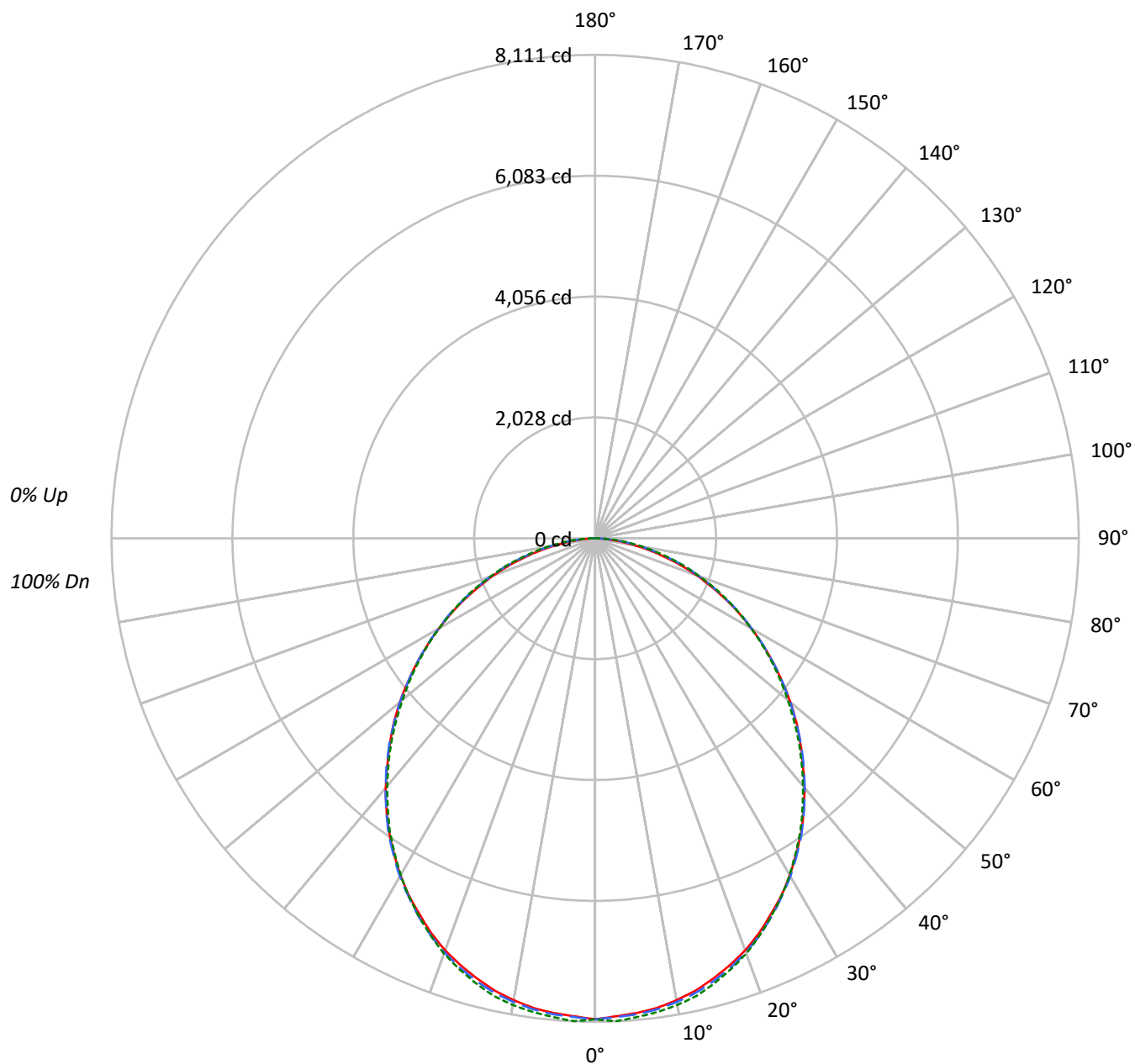
Input Watts (W): 150
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P730787

CATALOG NUMBER: HBLED-LD5-24SE-W-FLI-UNV-L835

Luminous Intensity Polar Plot





TEST NUMBER: P730787

CATALOG NUMBER: HBLED-LD5-24SE-W-FLI-UNV-L835

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84		
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60		
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51		
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45		
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39		
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35		
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31		
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28		
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13032	13032	13032
5°	12958	12995	13069
10°	12899	12951	13036
15°	12786	12855	12918
20°	12641	12702	12739
25°	12407	12477	12459
30°	12178	12211	12161
35°	11877	11907	11831
40°	11520	11520	11431
45°	11117	11147	11033
50°	10735	10717	10583
55°	10270	10272	10179
60°	9773	9784	9746
65°	9211	9303	9326
70°	8507	8740	8750
75°	7518	8006	8130
80°	6166	7011	7407
85°	4279	5885	6656



TEST NUMBER: P730787

CATALOG NUMBER: HBLED-LD5-24SE-W-FLI-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	763.4	3.6
10°-20°	2171.6	10.3
20°-30°	3227.2	15.3
30°-40°	3773.4	17.9
40°-50°	3762.2	17.8
50°-60°	3264.2	15.5
60°-70°	2411.0	11.4
70°-80°	1349.9	6.4
80°-90°	360.2	1.7
90°-100°	1.1	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	6162.2	29.2
0°-40°	9935.5	47.1
0°-60°	16961.9	80.4
0°-90°	21082.9	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	21084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8072	8072	8072	8072	8072	
5°	7995	8045	8018	8053	8063	759
15°	7649	7703	7691	7728	7728	2157
25°	6964	7020	7004	7019	6994	3211
35°	6026	6078	6041	6040	6002	3764
45°	4869	4920	4882	4862	4832	3758
55°	3648	3674	3649	3643	3616	3263
65°	2411	2435	2435	2447	2441	2384
75°	1205	1241	1283	1292	1303	1284
85°	231	279	318	346	359	281
90°	0	5	6	14	13	9
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P730787

CATALOG NUMBER: HBLED-LD5-24SE-W-FLI-UNV-L835

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8071.5	8071.5	8071.5	8071.5	8071.5
2.5°	8027.4	8075.2	8041.8	8073.6	8110.6
5°	7995.1	8045.4	8017.6	8053.0	8063.3
7.5°	7947.9	7996.7	7969.9	8005.4	8016.1
10°	7867.8	7920.7	7899.6	7939.7	7951.0
12.5°	7774.4	7824.1	7810.3	7857.0	7864.7
15°	7649.1	7702.6	7690.7	7727.7	7728.2
17.5°	7510.5	7560.8	7552.1	7580.9	7579.8
20°	7357.1	7410.9	7392.5	7423.8	7414.0
22.5°	7175.4	7232.9	7209.7	7235.9	7211.3
25°	6964.4	7020.4	7003.9	7019.3	6993.7
27.5°	6760.1	6811.4	6777.5	6796.0	6768.8
30°	6532.2	6575.8	6549.7	6555.8	6523.0
32.5°	6276.0	6327.9	6296.0	6295.0	6260.1
35°	6025.6	6078.4	6041.0	6039.9	6002.5
37.5°	5748.4	5797.6	5753.5	5756.1	5712.5
40°	5465.5	5508.2	5465.5	5463.5	5423.5
42.5°	5158.6	5215.1	5176.1	5180.6	5127.3
45°	4868.6	4920.5	4882.0	4861.9	4832.1
47.5°	4579.7	4602.2	4570.4	4565.2	4523.2
50°	4273.7	4290.6	4266.5	4260.3	4213.1
52.5°	3957.5	3986.8	3955.9	3947.7	3916.5
55°	3648.5	3673.6	3649.0	3642.8	3616.1
57.5°	3337.5	3370.3	3345.2	3338.9	3317.5
60°	3026.4	3036.1	3030.0	3039.2	3018.2
62.5°	2717.4	2739.9	2747.2	2744.6	2728.2
65°	2410.9	2434.6	2435.1	2447.4	2441.2
67.5°	2097.3	2128.1	2136.9	2149.7	2155.3
70°	1802.1	1825.8	1851.5	1859.1	1853.5
72.5°	1505.0	1542.9	1571.7	1578.4	1602.5
75°	1205.2	1241.1	1283.3	1292.5	1303.2
77.5°	927.0	974.7	1012.7	1025.1	1038.4
80°	663.2	716.0	754.0	770.9	796.6
82.5°	435.3	489.2	527.7	544.6	575.9
85°	231.0	279.3	317.7	345.9	359.3
87.5°	68.3	109.3	131.4	139.6	151.5
90°	0.0	5.1	6.1	13.8	12.9
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P730787

CATALOG NUMBER: HBLED-LD5-24SE-W-FLI-UNV-L835

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - 90°-270°







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)