

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: P730356

Luminaire Tested: **HBLED-LD5-12SE-W-FLI-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730356
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-LD5-12SE-W-FLI-UNV-L840
Description: 12000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10846.0 lumens
Efficiency: N/A
Efficacy: 144.6 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

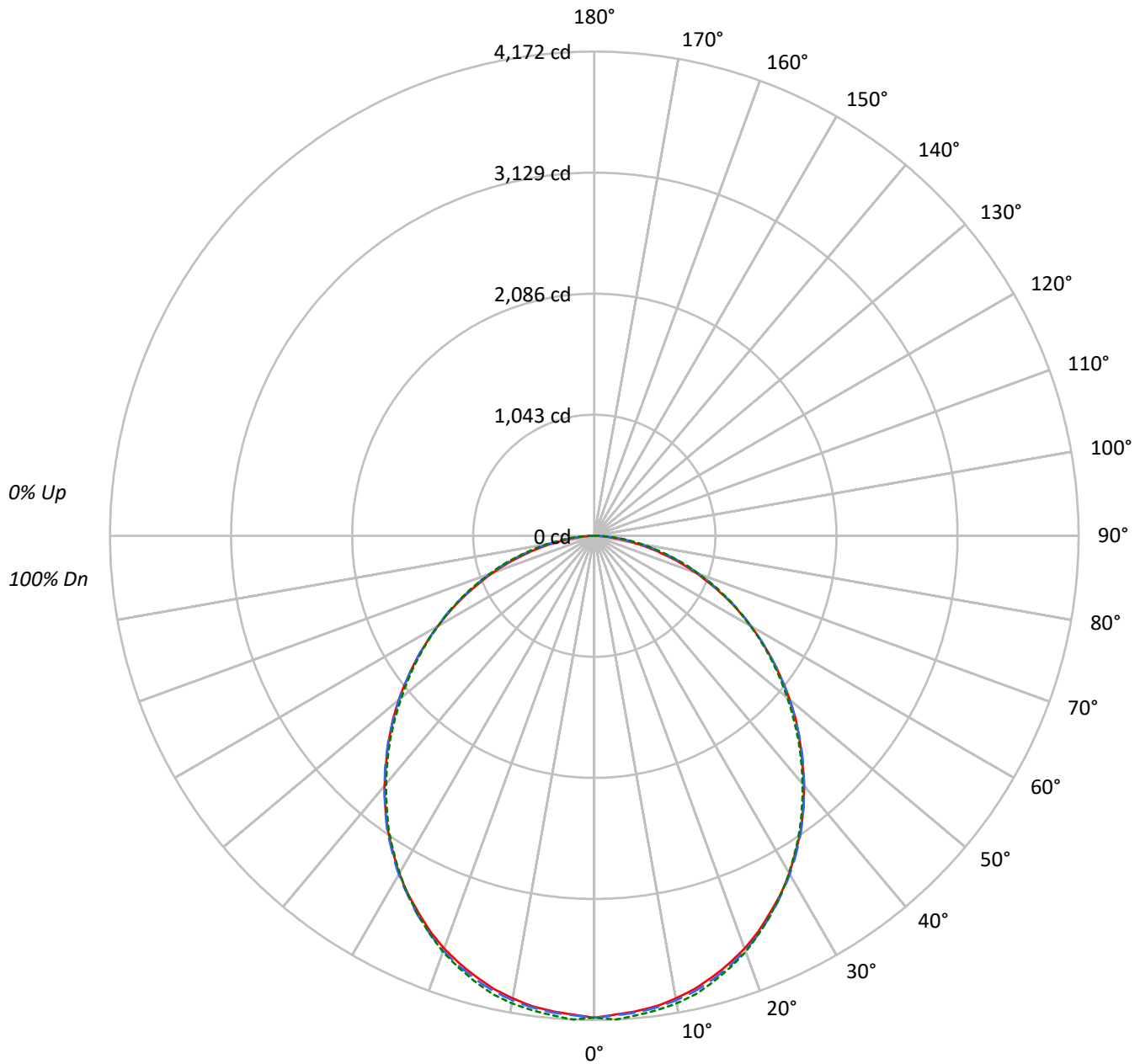
Input Watts (W): 75
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	6704	6704	6704
5°	6666	6685	6723
10°	6636	6662	6706
15°	6577	6613	6645
20°	6503	6534	6553
25°	6382	6419	6409
30°	6265	6282	6256
35°	6110	6125	6086
40°	5926	5926	5880
45°	5719	5734	5676
50°	5522	5513	5444
55°	5283	5284	5236
60°	5028	5033	5014
65°	4738	4785	4798
70°	4376	4496	4501
75°	3868	4118	4182
80°	3172	3607	3810
85°	2201	3029	3423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	392.7	3.6
10°-20°	1117.1	10.3
20°-30°	1660.1	15.3
30°-40°	1941.1	17.9
40°-50°	1935.3	17.8
50°-60°	1679.1	15.5
60°-70°	1240.3	11.4
70°-80°	694.4	6.4
80°-90°	185.3	1.7
90°-100°	0.6	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°	3169.9	29.2
0°-40°	5111.0	47.1
0°-60°	8725.5	80.4
0°-90°	10845.4	100.0
90°-120°	0.6	0.0
90°-150°	0.6	0.0
90°-180°	1.0	0.0
0°-180°	10846.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4152	4152	4152	4152	4152	
5°	4113	4139	4124	4143	4148	391
15°	3935	3962	3956	3975	3976	1110
25°	3583	3611	3603	3611	3598	1652
35°	3100	3127	3108	3107	3088	1936
45°	2504	2531	2511	2501	2486	1933
55°	1877	1890	1877	1874	1860	1678
65°	1240	1252	1253	1259	1256	1227
75°	620	638	660	665	670	660
85°	119	144	164	178	185	144
90°	0	3	3	7	7	5
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4152.2	4152.2	4152.2	4152.2	4152.2
2.5°	4129.5	4154.0	4136.8	4153.2	4172.3
5°	4112.8	4138.7	4124.4	4142.6	4147.9
7.5°	4088.5	4113.6	4099.9	4118.1	4123.7
10°	4047.3	4074.5	4063.7	4084.3	4090.1
12.5°	3999.3	4024.9	4017.8	4041.8	4045.7
15°	3934.9	3962.3	3956.2	3975.3	3975.5
17.5°	3863.6	3889.4	3884.9	3899.7	3899.2
20°	3784.6	3812.3	3802.8	3818.9	3813.9
22.5°	3691.1	3720.7	3708.8	3722.3	3709.6
25°	3582.6	3611.4	3603.0	3610.8	3597.7
27.5°	3477.5	3503.9	3486.5	3496.0	3482.0
30°	3360.3	3382.7	3369.3	3372.4	3355.5
32.5°	3228.5	3255.2	3238.8	3238.3	3220.3
35°	3099.7	3126.8	3107.6	3107.0	3087.8
37.5°	2957.1	2982.4	2959.7	2961.0	2938.6
40°	2811.6	2833.5	2811.6	2810.5	2790.0
42.5°	2653.7	2682.7	2662.7	2665.0	2637.6
45°	2504.5	2531.2	2511.4	2501.1	2485.7
47.5°	2355.9	2367.5	2351.1	2348.4	2326.8
50°	2198.5	2207.2	2194.8	2191.6	2167.3
52.5°	2035.8	2050.9	2035.0	2030.8	2014.7
55°	1876.8	1889.8	1877.1	1873.9	1860.2
57.5°	1716.8	1733.7	1720.8	1717.6	1706.6
60°	1556.9	1561.8	1558.7	1563.4	1552.6
62.5°	1397.9	1409.5	1413.2	1411.9	1403.4
65°	1240.2	1252.4	1252.6	1259.0	1255.8
67.5°	1078.9	1094.7	1099.3	1105.8	1108.7
70°	927.0	939.2	952.4	956.4	953.5
72.5°	774.2	793.7	808.5	811.9	824.4
75°	620.0	638.5	660.1	664.9	670.4
77.5°	476.9	501.4	521.0	527.3	534.2
80°	341.2	368.3	387.9	396.6	409.8
82.5°	223.9	251.6	271.4	280.1	296.3
85°	118.8	143.7	163.5	178.0	184.8
87.5°	35.1	56.2	67.6	71.8	77.9
90°	0.0	2.6	3.2	7.1	6.6
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



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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)