

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: P730357

Luminaire Tested: **HBLED-LD5-12SE-W-FLI-UNV-L850**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730357
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-L850
Description: 12000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11059.0 lumens
Efficiency: N/A
Efficacy: 147.5 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

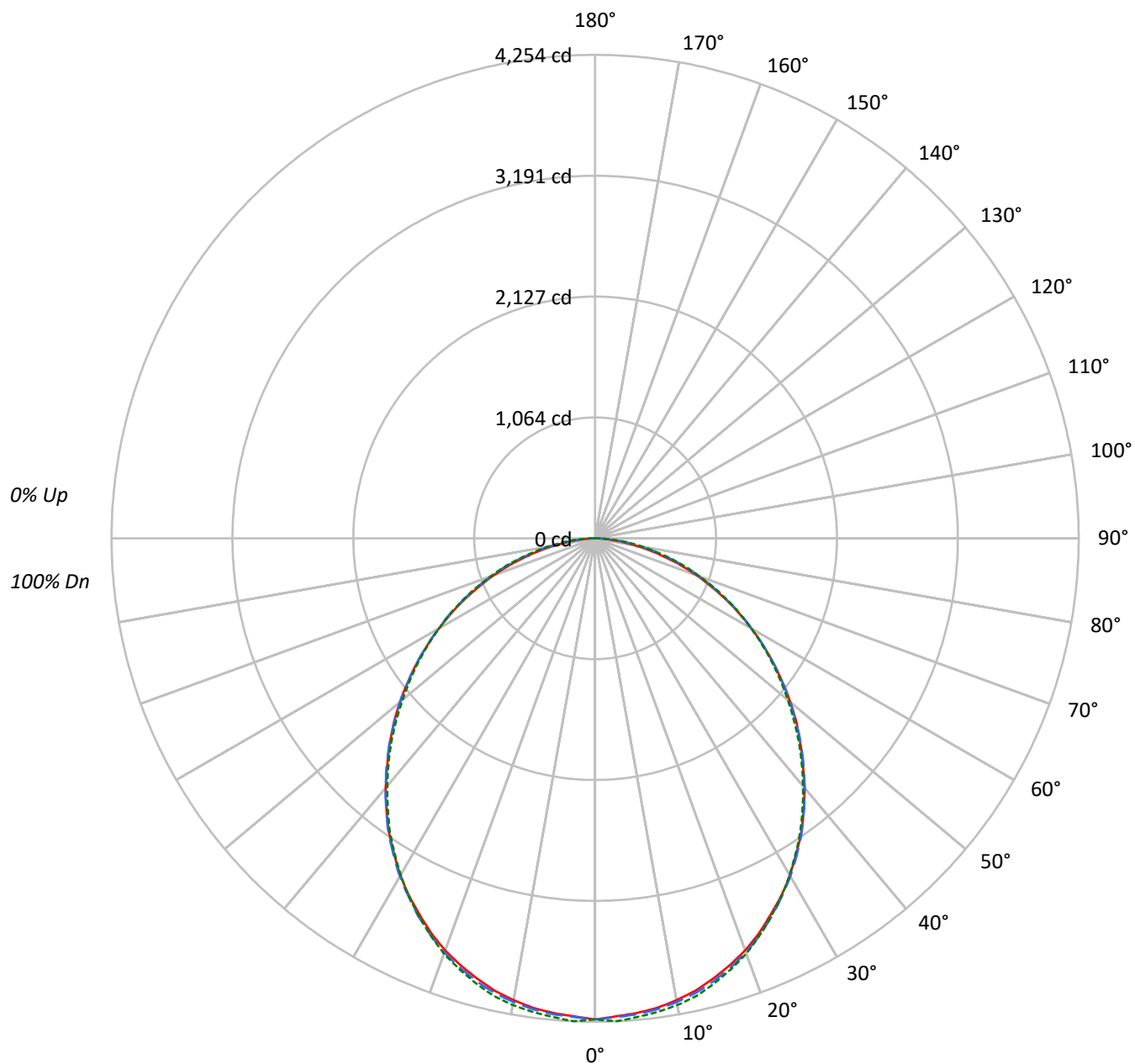
Input Watts (W): 75
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P730357

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850

Luminous Intensity Polar Plot





TEST NUMBER: P730357

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850

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°	6836	6836	6836
5°	6797	6816	6855
10°	6766	6793	6837
15°	6706	6743	6776
20°	6631	6662	6682
25°	6508	6545	6535
30°	6388	6405	6379
35°	6229	6245	6206
40°	6042	6042	5996
45°	5831	5847	5787
50°	5631	5621	5551
55°	5387	5388	5339
60°	5126	5132	5112
65°	4831	4879	4892
70°	4463	4584	4590
75°	3944	4199	4264
80°	3235	3677	3886
85°	2245	3088	3492



TEST NUMBER: P730357

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.4	3.6
10°-20°	1139.1	10.3
20°-30°	1692.7	15.3
30°-40°	1979.2	17.9
40°-50°	1973.4	17.8
50°-60°	1712.1	15.5
60°-70°	1264.6	11.4
70°-80°	708.0	6.4
80°-90°	188.9	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°	3232.2	29.2
0°-40°	5211.4	47.1
0°-60°	8896.9	80.4
0°-90°	11058.4	100.0
90°-120°	0.6	0.0
90°-150°	0.6	0.0
90°-180°	1.0	0.0
0°-180°	11059.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4234	4234	4234	4234	4234	
5°	4194	4220	4205	4224	4229	398
15°	4012	4040	4034	4053	4054	1132
25°	3653	3682	3674	3682	3668	1684
35°	3160	3188	3169	3168	3148	1974
45°	2554	2581	2561	2550	2535	1971
55°	1914	1927	1914	1911	1897	1711
65°	1265	1277	1277	1284	1280	1251
75°	632	651	673	678	684	673
85°	121	146	167	182	188	147
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	



TEST NUMBER: P730357

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4233.7	4233.7	4233.7	4233.7	4233.7
2.5°	4210.6	4235.6	4218.1	4234.8	4254.2
5°	4193.6	4220.0	4205.4	4224.0	4229.4
7.5°	4168.8	4194.4	4180.4	4199.0	4204.6
10°	4126.8	4154.6	4143.5	4164.5	4170.4
12.5°	4077.8	4103.9	4096.7	4121.1	4125.2
15°	4012.1	4040.2	4033.9	4053.3	4053.6
17.5°	3939.4	3965.8	3961.2	3976.3	3975.8
20°	3859.0	3887.2	3877.5	3893.9	3888.8
22.5°	3763.6	3793.8	3781.6	3795.4	3782.5
25°	3653.0	3682.3	3673.7	3681.8	3668.3
27.5°	3545.8	3572.7	3554.9	3564.6	3550.4
30°	3426.3	3449.1	3435.4	3438.7	3421.4
32.5°	3291.9	3319.1	3302.4	3301.9	3283.6
35°	3160.5	3188.2	3168.6	3168.1	3148.4
37.5°	3015.1	3041.0	3017.8	3019.2	2996.3
40°	2866.8	2889.2	2866.8	2865.7	2844.7
42.5°	2705.8	2735.4	2715.0	2717.4	2689.4
45°	2553.7	2580.9	2560.7	2550.2	2534.6
47.5°	2402.1	2414.0	2397.3	2394.6	2372.5
50°	2241.6	2250.5	2237.9	2234.6	2209.9
52.5°	2075.8	2091.2	2075.0	2070.7	2054.3
55°	1913.7	1926.9	1914.0	1910.7	1896.7
57.5°	1750.6	1767.8	1754.6	1751.3	1740.1
60°	1587.4	1592.5	1589.3	1594.1	1583.1
62.5°	1425.3	1437.2	1440.9	1439.6	1431.0
65°	1264.6	1277.0	1277.2	1283.7	1280.5
67.5°	1100.1	1116.2	1120.8	1127.5	1130.5
70°	945.3	957.7	971.1	975.1	972.2
72.5°	789.4	809.3	824.4	827.9	840.5
75°	632.2	651.0	673.1	677.9	683.6
77.5°	486.2	511.3	531.2	537.7	544.7
80°	347.9	375.6	395.5	404.4	417.9
82.5°	228.3	256.6	276.8	285.6	302.1
85°	121.2	146.5	166.7	181.5	188.5
87.5°	35.8	57.3	68.9	73.2	79.4
90°	0.0	2.7	3.2	7.3	6.7
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: P730357

CATALOG NUMBER: HBLED-LD5-12SE-W-FLI-UNV-L850

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)