

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: PORTFOLIO

Report Number: P247391

Luminaire Tested: **LD8B90D010 ER8B90835 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247391  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13927)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B90D010 ER8B90835 8LBW0WH  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT  
80 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9800.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.12  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

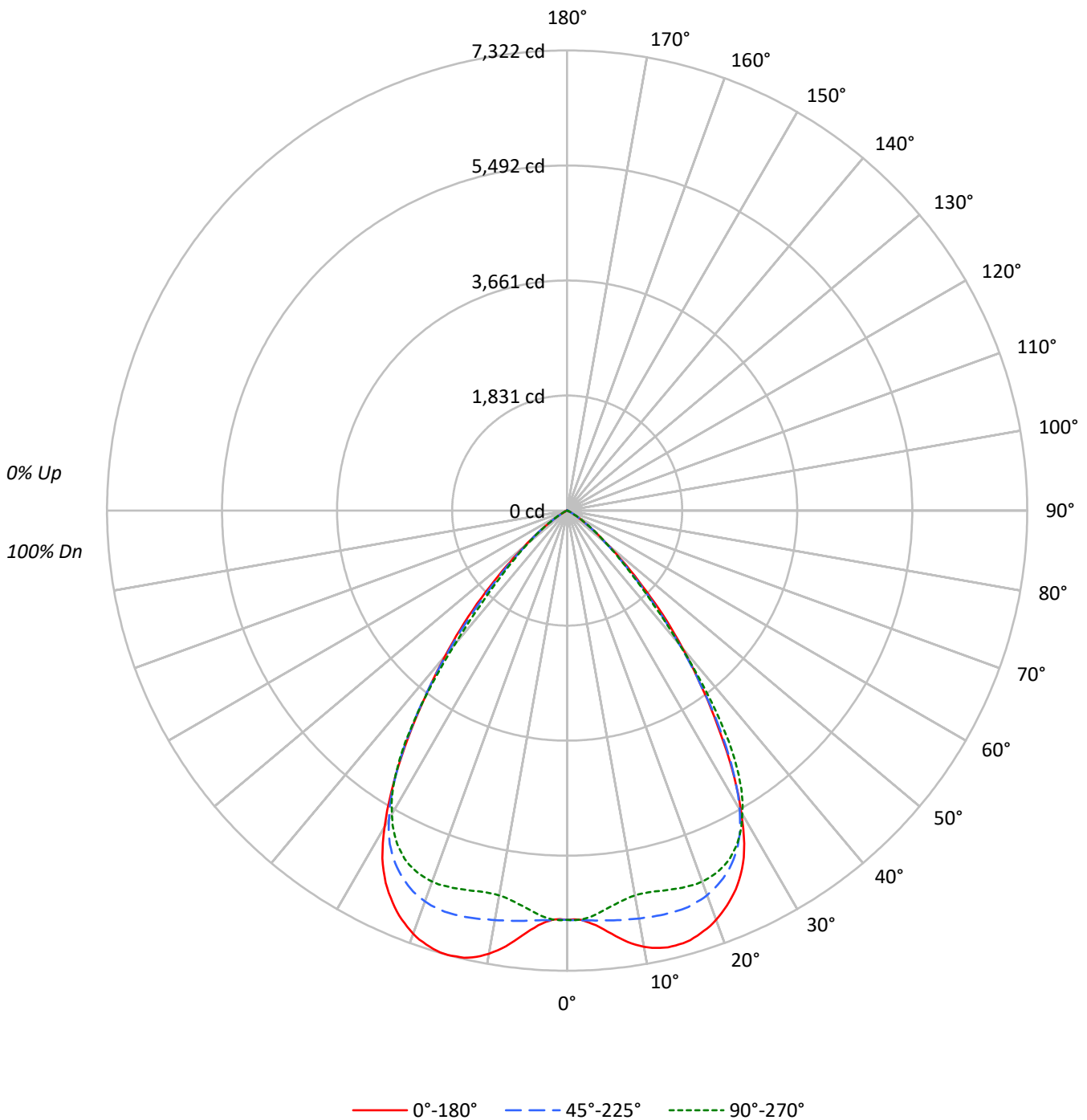
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	76
4	94	85	79	74	92	84	79	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	67	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	200871	200871	200871
5°	207033	198041	207377
10°	220690	194698	224160
15°	227482	199475	233751
20°	227476	206136	235194
25°	220507	208078	228417
30°	197361	198543	206818
35°	157195	168962	165943
40°	114845	111729	121414
45°	73368	65409	79770
50°	39693	38896	42614
55°	20381	21128	20381
60°	8875	8875	6482
65°	1817	2430	2021
70°	1244	1749	1993
75°	0	989	0
80°	479	479	1953
85°	0	955	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	627.9	6.4
10°-20°	1889.1	19.3
20°-30°	2875.3	29.3
30°-40°	2675.8	27.3
40°-50°	1302.3	13.3
50°-60°	371.1	3.8
60°-70°	48.5	0.5
70°-80°	7.7	0.1
80°-90°	2.3	0.0
90°-100°	0.0	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°	5392.3	55.0
0°-40°	8068.1	82.3
0°-60°	9741.5	99.4
0°-90°	9800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9800.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6514	6514	6514	6514	6514	
5°	6688	6542	6398	6547	6700	651
15°	7126	6608	6248	6672	7322	2005
25°	6481	6199	6116	6334	6713	2942
35°	4176	4234	4488	4441	4408	2596
45°	1682	1558	1500	1680	1829	1330
55°	379	379	393	385	379	372
65°	25	30	33	30	28	48
75°	0	3	8	3	0	5
85°	0	3	3	6	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	6514.1	6514.1	6514.1	6514.1	6514.1	6514.1	6514.1	6514.1	6514.1
1°	6505.7	6514.1	6519.6	6516.9	6519.6	6516.9	6511.3	6500.3	6500.3
2°	6516.9	6528.0	6525.1	6519.6	6511.3	6511.3	6528.0	6505.7	6511.3
3°	6561.1	6561.1	6528.0	6497.5	6486.4	6497.5	6525.1	6541.7	6555.6
4°	6616.5	6605.4	6539.0	6469.9	6447.7	6475.3	6536.3	6588.8	6616.5
5°	6688.4	6655.2	6541.7	6436.6	6397.9	6439.3	6547.3	6646.9	6699.5
6°	6771.5	6721.6	6558.4	6400.6	6350.8	6408.9	6563.9	6716.1	6796.3
7°	6854.5	6774.2	6566.7	6372.9	6309.3	6389.6	6577.7	6793.6	6898.7
8°	6932.0	6824.0	6575.0	6348.1	6270.5	6353.6	6588.8	6862.7	7001.1
9°	6995.6	6871.0	6580.5	6328.7	6237.4	6331.5	6602.7	6923.7	7086.9
10°	7048.1	6907.0	6591.6	6317.6	6218.0	6320.4	6616.5	6976.3	7158.9
11°	7089.7	6932.0	6594.4	6312.1	6209.7	6312.1	6627.5	7028.8	7219.8
12°	7114.6	6954.1	6602.7	6314.8	6212.4	6320.4	6644.1	7051.0	7269.6
13°	7131.2	6962.4	6608.1	6323.2	6218.0	6325.9	6655.2	7070.4	7302.7
14°	7131.2	6956.9	6608.1	6331.5	6234.7	6336.9	6663.5	7084.1	7311.0
15°	7125.7	6954.1	6608.1	6345.3	6248.4	6348.1	6671.8	7092.5	7322.1
16°	7109.1	6937.4	6605.4	6353.6	6262.2	6359.2	6674.5	7086.9	7313.9
17°	7075.8	6929.2	6594.4	6361.9	6276.1	6370.2	6674.5	7073.1	7294.4
18°	7031.5	6871.0	6566.7	6353.6	6278.9	6367.5	6658.0	7037.1	7258.5
19°	6992.8	6837.9	6547.3	6348.1	6289.9	6375.8	6646.9	7012.2	7219.8
20°	6932.0	6782.5	6514.1	6331.5	6281.7	6359.2	6619.3	6968.0	7167.2
21°	6857.2	6718.9	6467.0	6303.8	6267.8	6336.9	6580.5	6907.0	7095.2
22°	6782.5	6646.9	6417.2	6276.1	6245.7	6317.6	6539.0	6843.4	7020.5
23°	6693.9	6566.7	6353.6	6229.1	6212.4	6273.4	6480.9	6774.2	6932.0
24°	6594.4	6472.6	6284.4	6176.5	6171.0	6226.3	6414.5	6682.9	6826.8
25°	6480.9	6372.9	6198.7	6110.0	6115.6	6162.7	6334.2	6580.5	6713.4
26°	6345.3	6245.7	6099.0	6029.9	6038.2	6085.2	6242.9	6461.6	6588.8
27°	6193.1	6101.7	5982.8	5932.9	5955.1	5996.6	6132.3	6331.5	6433.9
28°	6002.2	5930.2	5844.4	5822.3	5850.0	5897.1	6010.5	6173.7	6265.1
29°	5780.8	5742.0	5675.6	5686.7	5725.4	5764.1	5858.2	5977.2	6049.2
30°	5542.8	5526.2	5487.5	5531.8	5576.0	5609.2	5672.9	5753.1	5808.4
31°	5299.3	5279.9	5285.4	5357.4	5423.8	5445.9	5481.9	5520.6	5562.2
32°	5025.4	5019.8	5041.9	5147.1	5232.9	5243.9	5246.7	5257.7	5279.9
33°	4745.8	4737.5	4781.8	4911.9	5008.7	5017.0	4994.8	4983.8	5000.4
34°	4455.3	4455.3	4513.4	4649.0	4762.5	4770.7	4726.5	4720.9	4704.3
35°	4175.8	4167.4	4233.9	4361.2	4488.4	4491.3	4441.4	4411.0	4408.2
37.5°	3483.9	3470.1	3492.2	3558.6	3652.7	3702.6	3697.0	3686.0	3677.7
40°	2853.0	2819.9	2775.6	2747.9	2775.6	2878.0	2966.5	3008.0	3016.2
42.5°	2258.1	2211.1	2117.0	2039.4	2050.6	2144.7	2280.2	2374.3	2421.3
45°	1682.4	1635.4	1558.0	1499.9	1499.9	1566.3	1679.7	1776.5	1829.2
47.5°	1201.0	1170.6	1126.3	1101.3	1117.9	1145.6	1209.3	1281.3	1303.4
50°	827.4	819.1	794.2	794.2	810.8	833.0	844.0	880.0	888.3
52.5°	578.4	564.5	567.2	570.1	583.9	586.7	603.2	594.9	608.8
55°	379.1	379.1	379.1	387.4	393.0	393.0	384.6	379.1	379.1
57.5°	240.8	235.2	237.9	243.5	243.5	235.2	221.4	218.6	204.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	143.9	143.9	146.7	146.7	143.9	135.5	121.8	110.7	105.1
62.5°	74.7	77.5	77.5	91.3	77.5	69.1	63.7	49.8	47.0
65°	24.9	30.4	30.4	30.4	33.3	30.4	30.4	27.7	27.7
67.5°	16.6	19.4	19.4	22.1	22.1	22.1	22.1	27.7	19.4
70°	13.8	13.8	16.6	19.4	19.4	22.1	16.6	13.8	22.1
72.5°	8.3	11.0	8.3	13.8	11.0	11.0	11.0	11.0	11.0
75°	0.0	5.6	2.7	0.0	8.3	5.6	2.7	5.6	0.0
77.5°	2.7	2.7	2.7	2.7	5.6	5.6	5.6	5.6	2.7
80°	2.7	2.7	5.6	2.7	2.7	5.6	0.0	0.0	11.0
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	0.0	2.7	2.7
85°	0.0	2.7	2.7	2.7	2.7	2.7	5.6	5.6	0.0
87.5°	0.0	2.7	0.0	2.7	0.0	0.0	0.0	5.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)