

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: P250184

Luminaire Tested: **LD8B90D010 ER8B90950 8LBM0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13942)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B90D010 ER8B90950 8LBM0WH  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8720.0 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.8 / 0.85  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

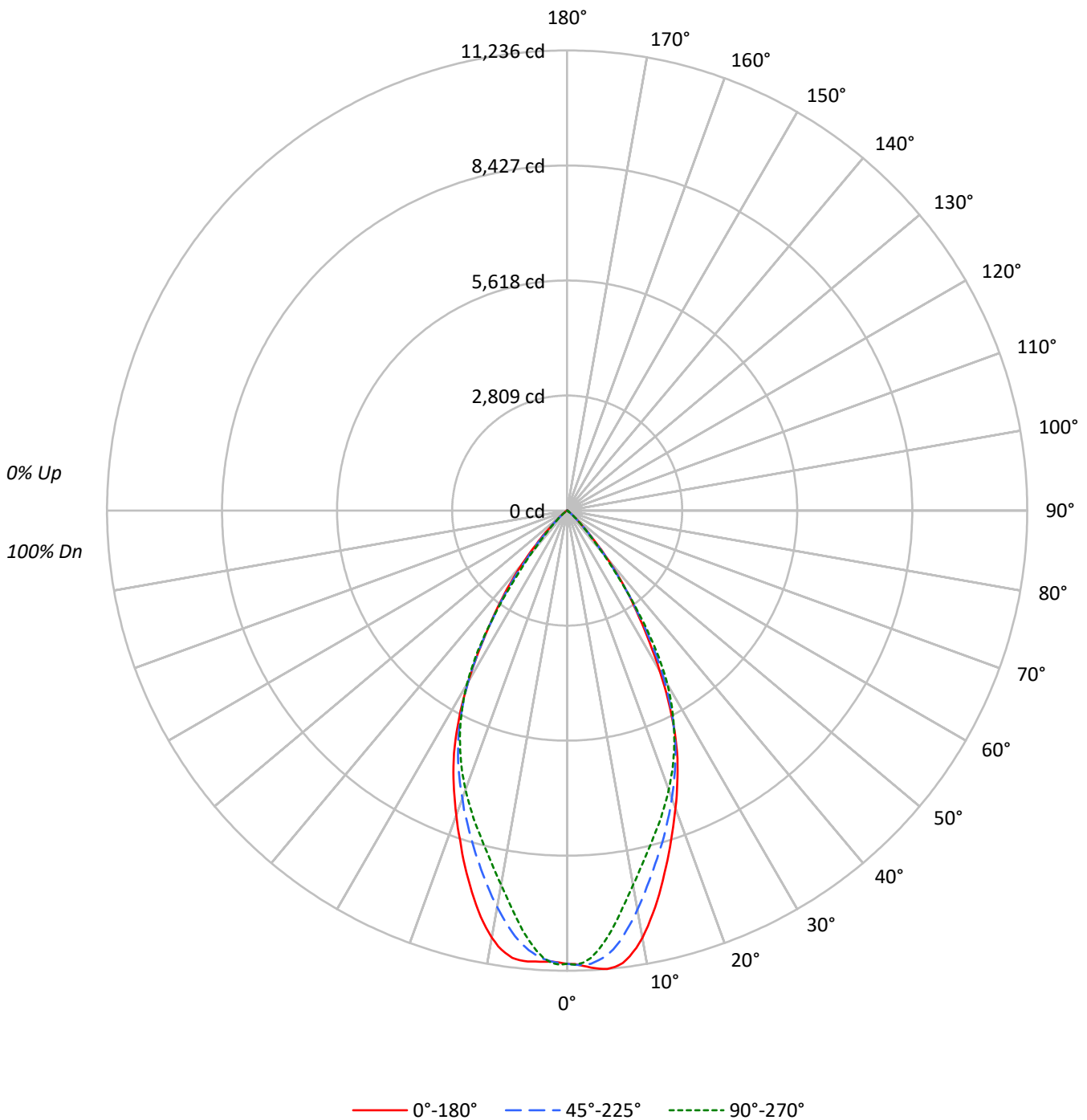
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P250184

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBM0WH

### Luminous Intensity Polar Plot





TEST NUMBER: P250184

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBM0WH

**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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94				94
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87				87
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81				81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76				76
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71				71
6	88	80	74	69	87	79	73	69	77	72	69	76	72	68	75	71	68	66				66
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62				62
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58				58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	64	59	56	55				55
10	73	63	57	54	72	63	57	54	62	57	53	61	56	53	60	56	53	52				52

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

	0°	90°	180°
0°	341250	341250	341250
5°	347800	326730	342136
10°	331600	290657	331516
15°	292817	262151	297798
20°	253754	237947	259756
25°	214400	210739	222273
30°	161142	174459	172158
35°	107869	114047	116987
40°	60437	51879	69317
45°	24290	21355	28865
50°	8390	8131	9940
55°	2317	2753	2607
60°	1326	1659	1492
65°	1175	978	781
70°	0	730	487
75°	0	0	0
80°	0	0	479
85°	0	0	0



TEST NUMBER: P250184

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBM0WH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1004.6	11.5
10°-20°	2429.8	27.9
20°-30°	2847.9	32.7
30°-40°	1873.7	21.5
40°-50°	489.0	5.6
50°-60°	60.1	0.7
60°-70°	12.5	0.1
70°-80°	2.3	0.0
80°-90°	0.1	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°	6282.3	72.0
0°-40°	8156.0	93.5
0°-60°	8705.1	99.8
0°-90°	8720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8720.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	11066	11066	11066	11066	11066	
5°	11236	10916	10555	10773	11053	###
15°	9172	8653	8212	8653	9328	2557
25°	6301	6240	6194	6299	6533	2841
35°	2866	2930	3030	3059	3108	1794
45°	557	525	490	568	662	499
55°	43	46	51	51	48	57
65°	16	13	13	11	11	11
75°	0	3	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P250184

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBM0WH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	11066.5	11066.5	11066.5	11066.5	11066.5	11066.5	11066.5	11066.5	11066.5
1°	11074.5	11090.7	11096.0	11112.2	11088.0	11071.9	11050.3	11034.1	11036.8
2°	11122.9	11131.0	11101.4	11090.7	11047.6	11034.1	11018.0	11015.3	11018.0
3°	11174.1	11157.9	11079.9	11007.3	10942.7	10934.6	10964.2	11007.3	11031.4
4°	11214.5	11171.4	11007.3	10872.7	10770.5	10762.4	10880.8	10991.1	11036.8
5°	11236.0	11157.9	10915.8	10689.8	10555.3	10606.3	10773.2	10969.6	11053.0
6°	11206.4	11090.7	10775.9	10474.5	10321.1	10388.4	10633.3	10918.5	11042.2
7°	11131.0	10983.0	10595.6	10240.4	10052.1	10157.0	10469.1	10832.4	11001.9
8°	10991.1	10813.5	10366.9	9968.7	9783.0	9901.4	10267.4	10708.6	10905.0
9°	10808.1	10611.7	10140.9	9721.1	9522.0	9661.9	10057.5	10544.5	10770.5
10°	10590.2	10380.3	9890.7	9462.9	9282.6	9414.4	9831.5	10353.4	10587.5
11°	10334.6	10132.8	9640.4	9220.7	9048.5	9177.7	9605.5	10124.8	10377.6
12°	10057.5	9871.8	9384.8	8986.6	8825.2	8949.0	9363.3	9888.0	10138.2
13°	9780.3	9594.7	9137.3	8760.6	8612.6	8731.0	9126.5	9629.7	9879.9
14°	9481.7	9312.2	8889.8	8545.3	8410.8	8523.8	8884.4	9368.7	9605.5
15°	9172.3	9037.7	8653.0	8338.1	8211.7	8319.3	8653.0	9099.6	9328.3
16°	8881.7	8757.9	8424.3	8133.7	8028.8	8114.8	8418.9	8830.6	9048.5
17°	8585.7	8472.7	8195.5	7931.9	7837.7	7921.1	8179.4	8558.8	8755.2
18°	8289.8	8195.5	7945.4	7719.4	7636.0	7711.3	7942.7	8284.4	8461.9
19°	8015.3	7929.2	7716.7	7525.6	7450.3	7517.5	7735.5	8020.7	8198.2
20°	7732.8	7662.8	7477.2	7321.1	7251.1	7313.0	7482.6	7759.7	7915.7
21°	7461.0	7399.1	7237.7	7105.9	7049.4	7100.5	7256.5	7506.8	7644.0
22°	7178.5	7143.6	6998.3	6887.9	6850.3	6882.5	7025.1	7240.4	7369.6
23°	6901.4	6869.1	6758.8	6667.3	6635.0	6667.3	6793.8	6987.5	7103.2
24°	6621.6	6586.6	6505.9	6446.7	6419.8	6446.7	6554.3	6718.4	6828.8
25°	6301.4	6296.0	6239.5	6207.2	6193.8	6223.3	6298.7	6441.3	6532.8
26°	5994.6	5978.5	5962.4	5957.0	5959.7	5975.8	6037.7	6145.3	6218.0
27°	5618.0	5642.2	5666.4	5698.7	5709.4	5722.9	5752.5	5830.5	5884.4
28°	5257.4	5303.2	5362.4	5426.9	5456.6	5456.6	5459.2	5502.3	5548.0
29°	4899.6	4948.0	5042.2	5139.0	5179.4	5174.0	5152.5	5171.3	5198.2
30°	4525.6	4587.5	4714.0	4840.4	4899.6	4878.1	4837.7	4818.9	4835.0
31°	4159.7	4221.6	4361.5	4498.7	4576.7	4552.5	4482.5	4469.1	4477.1
32°	3809.9	3871.8	4000.9	4146.2	4235.0	4202.7	4130.1	4108.5	4111.2
33°	3470.9	3519.3	3637.7	3772.3	3844.9	3836.8	3777.6	3750.7	3753.4
34°	3150.7	3191.1	3279.8	3382.1	3452.0	3449.3	3406.3	3409.0	3417.1
35°	2865.5	2887.0	2930.0	2986.6	3029.6	3053.8	3059.2	3080.7	3107.7
37.5°	2166.0	2174.0	2122.9	2066.4	2055.6	2125.6	2246.7	2351.6	2392.0
40°	1501.4	1482.5	1417.9	1318.4	1288.8	1366.9	1520.2	1668.2	1722.0
42.5°	933.7	925.6	885.2	809.9	783.0	828.7	944.4	1057.4	1111.2
45°	557.0	546.2	524.6	495.1	489.7	508.5	567.7	632.3	661.9
47.5°	320.2	317.5	304.0	293.3	290.6	304.0	330.9	368.6	376.7
50°	174.9	172.2	169.5	169.5	169.5	177.6	191.1	201.8	207.2
52.5°	86.1	88.8	86.1	88.8	91.5	96.8	94.1	104.9	104.9
55°	43.1	40.4	45.8	51.2	51.2	51.2	51.2	51.2	48.5
57.5°	32.3	35.0	29.6	32.3	29.6	29.6	26.9	29.6	32.3



TEST NUMBER: P250184

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBM0WH

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	21.5	18.8	21.5	24.2	26.9	24.2	18.8	21.5	24.2
62.5°	10.7	10.7	10.7	16.1	24.2	18.8	16.1	13.4	13.4
65°	16.1	10.7	13.4	16.1	13.4	13.4	10.7	13.4	10.7
67.5°	8.1	13.4	8.1	5.4	8.1	10.7	8.1	5.4	5.4
70°	0.0	2.7	2.7	8.1	8.1	8.1	8.1	5.4	5.4
72.5°	2.7	2.7	2.7	5.4	2.7	5.4	2.7	2.7	5.4
75°	0.0	0.0	2.7	2.7	0.0	2.7	0.0	0.0	0.0
77.5°	2.7	0.0	2.7	2.7	0.0	0.0	0.0	2.7	0.0
80°	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)