

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: P247395

Luminaire Tested: **LSR8B90D010 EC8B90840 8LBW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247395
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: LSR8B90D010 EC8B90840 8LBW0WH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9736.0 lumens
Efficiency: N/A
Efficacy: 113.1 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

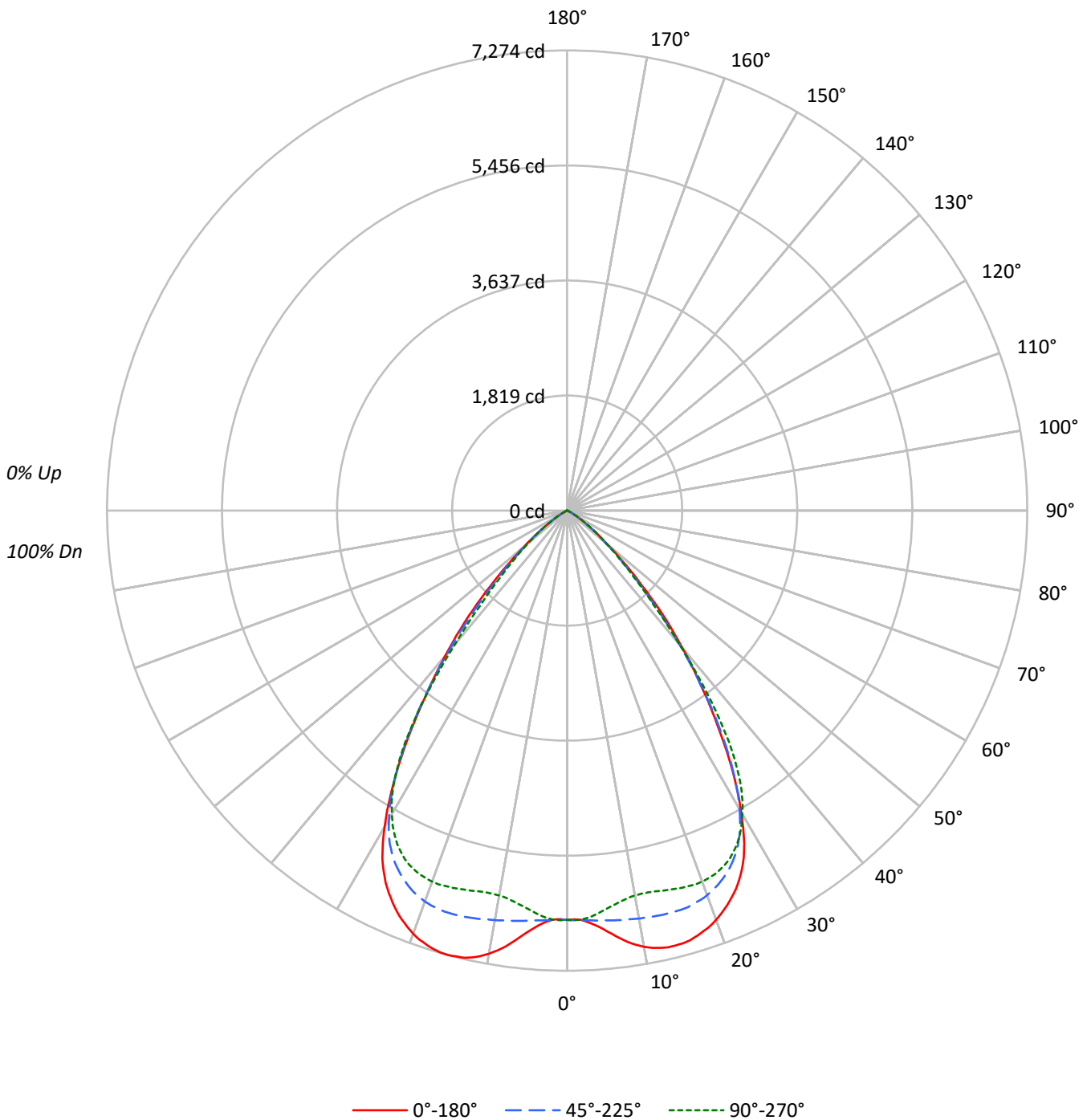
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	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°	199557	199557	199557
5°	205684	196747	206021
10°	219250	193427	222694
15°	225997	198172	232225
20°	225989	204791	233658
25°	219068	206720	226924
30°	196072	197243	205469
35°	156167	167859	164863
40°	114096	110996	120621
45°	72893	64982	79247
50°	39434	38642	42336
55°	20247	20988	20247
60°	8813	8813	6439
65°	1810	2408	2007
70°	1235	1731	1984
75°	0	989	0
80°	479	479	1953
85°	0	955	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	623.8	6.4
10°-20°	1876.7	19.3
20°-30°	2856.5	29.3
30°-40°	2658.3	27.3
40°-50°	1293.8	13.3
50°-60°	368.7	3.8
60°-70°	48.2	0.5
70°-80°	7.6	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°	5357.1	55.0
0°-40°	8015.4	82.3
0°-60°	9677.9	99.4
0°-90°	9736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9736.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6472	6472	6472	6472	6472	
5°	6645	6499	6356	6505	6656	647
15°	7079	6565	6208	6628	7274	1992
25°	6439	6158	6076	6293	6670	2923
35°	4148	4206	4459	4412	4380	2579
45°	1672	1548	1490	1669	1817	1321
55°	377	377	390	382	377	369
65°	25	30	33	30	28	47
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°	6471.5	6471.5	6471.5	6471.5	6471.5	6471.5	6471.5	6471.5	6471.5
1°	6463.3	6471.5	6477.1	6474.3	6477.1	6474.3	6468.8	6457.8	6457.8
2°	6474.3	6485.3	6482.5	6477.1	6468.8	6468.8	6485.3	6463.3	6468.8
3°	6518.3	6518.3	6485.3	6455.1	6444.0	6455.1	6482.5	6499.0	6512.8
4°	6573.2	6562.3	6496.3	6427.6	6405.5	6433.0	6493.6	6545.8	6573.2
5°	6644.8	6611.7	6499.0	6394.6	6356.1	6397.3	6504.6	6603.5	6655.7
6°	6727.3	6677.7	6515.5	6358.8	6309.4	6367.1	6521.1	6672.3	6751.9
7°	6809.7	6730.0	6523.8	6331.3	6268.1	6347.8	6534.8	6749.2	6853.7
8°	6886.7	6779.4	6532.1	6306.6	6229.6	6312.1	6545.8	6817.9	6955.4
9°	6950.0	6826.2	6537.5	6287.4	6196.7	6290.1	6559.6	6878.4	7040.6
10°	7002.1	6861.9	6548.6	6276.3	6177.4	6279.2	6573.2	6930.7	7112.1
11°	7043.4	6886.7	6551.3	6270.9	6169.2	6270.9	6584.2	6982.9	7172.6
12°	7068.1	6908.6	6559.6	6273.6	6171.9	6279.2	6600.7	7004.9	7222.1
13°	7084.6	6916.9	6565.0	6281.9	6177.4	6284.6	6611.7	7024.2	7255.0
14°	7084.6	6911.5	6565.0	6290.1	6193.9	6295.6	6620.0	7037.9	7263.3
15°	7079.2	6908.6	6565.0	6303.8	6207.6	6306.6	6628.2	7046.1	7274.3
16°	7062.7	6892.1	6562.3	6312.1	6221.3	6317.6	6631.0	7040.6	7266.1
17°	7029.6	6884.0	6551.3	6320.3	6235.1	6328.6	6631.0	7026.9	7246.8
18°	6985.6	6826.2	6523.8	6312.1	6237.8	6325.9	6614.6	6991.1	7211.1
19°	6947.1	6793.2	6504.6	6306.6	6248.8	6334.1	6603.5	6966.4	7172.6
20°	6886.7	6738.2	6471.5	6290.1	6240.7	6317.6	6576.1	6922.5	7120.4
21°	6812.5	6675.0	6424.8	6262.6	6226.9	6295.6	6537.5	6861.9	7048.9
22°	6738.2	6603.5	6375.3	6235.1	6204.9	6276.3	6496.3	6798.7	6974.6
23°	6650.2	6523.8	6312.1	6188.4	6171.9	6232.4	6438.6	6730.0	6886.7
24°	6551.3	6430.3	6243.4	6136.1	6130.7	6185.7	6372.6	6639.2	6782.3
25°	6438.6	6331.3	6158.2	6070.1	6075.7	6122.4	6292.8	6537.5	6669.5
26°	6303.8	6204.9	6059.2	5990.5	5998.7	6045.5	6202.1	6419.4	6545.8
27°	6152.6	6061.9	5943.7	5894.2	5916.3	5957.4	6092.2	6290.1	6391.9
28°	5963.0	5891.5	5806.3	5784.3	5811.8	5858.5	5971.2	6133.4	6224.2
29°	5743.0	5704.5	5638.6	5649.5	5688.0	5726.5	5820.0	5938.2	6009.7
30°	5506.6	5490.1	5451.6	5495.6	5539.5	5572.6	5635.8	5715.5	5770.5
31°	5264.7	5245.5	5250.9	5322.4	5388.4	5410.3	5446.1	5484.6	5525.9
32°	4992.5	4987.0	5008.9	5113.5	5198.7	5209.7	5212.4	5223.4	5245.5
33°	4714.9	4706.6	4750.6	4879.8	4976.0	4984.3	4962.2	4951.2	4967.8
34°	4426.2	4426.2	4483.9	4618.7	4731.4	4739.5	4695.6	4690.1	4673.5
35°	4148.5	4140.2	4206.2	4332.7	4459.1	4461.9	4412.4	4382.2	4379.5
37.5°	3461.2	3447.5	3469.4	3535.4	3628.9	3678.4	3672.9	3661.9	3653.7
40°	2834.4	2801.5	2757.4	2729.9	2757.4	2859.2	2947.1	2988.4	2996.5
42.5°	2243.4	2196.6	2103.2	2026.1	2037.2	2130.7	2265.3	2358.8	2405.5
45°	1671.5	1624.7	1547.8	1490.1	1490.1	1556.0	1668.7	1764.9	1817.2
47.5°	1193.1	1162.9	1118.9	1094.1	1110.6	1138.1	1201.4	1272.9	1294.9
50°	822.0	813.7	789.1	789.1	805.5	827.5	838.5	874.3	882.5
52.5°	574.6	560.8	563.5	566.4	580.0	582.9	599.3	591.0	604.8
55°	376.6	376.6	376.6	384.9	390.4	390.4	382.1	376.6	376.6
57.5°	239.2	233.7	236.4	241.9	241.9	233.7	220.0	217.2	203.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	142.9	142.9	145.7	145.7	142.9	134.7	121.0	110.0	104.4
62.5°	74.2	76.9	76.9	90.8	76.9	68.7	63.3	49.5	46.7
65°	24.8	30.2	30.2	30.2	33.0	30.2	30.2	27.5	27.5
67.5°	16.5	19.2	19.2	22.0	22.0	22.0	22.0	27.5	19.2
70°	13.7	13.7	16.5	19.2	19.2	22.0	16.5	13.7	22.0
72.5°	8.3	11.0	8.3	13.7	11.0	11.0	11.0	11.0	11.0
75°	0.0	5.5	2.7	0.0	8.3	5.5	2.7	5.5	0.0
77.5°	2.7	2.7	2.7	2.7	5.5	5.5	5.5	5.5	2.7
80°	2.7	2.7	5.5	2.7	2.7	5.5	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	5.5	5.5	0.0
87.5°	0.0	2.7	0.0	2.7	0.0	0.0	0.0	5.5	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)