

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: P247398

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247398  
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: LSR8B80D010 EC8B80850 8LBW0WH  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8813.0 lumens  
Efficiency: N/A  
Efficacy: 118.5 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

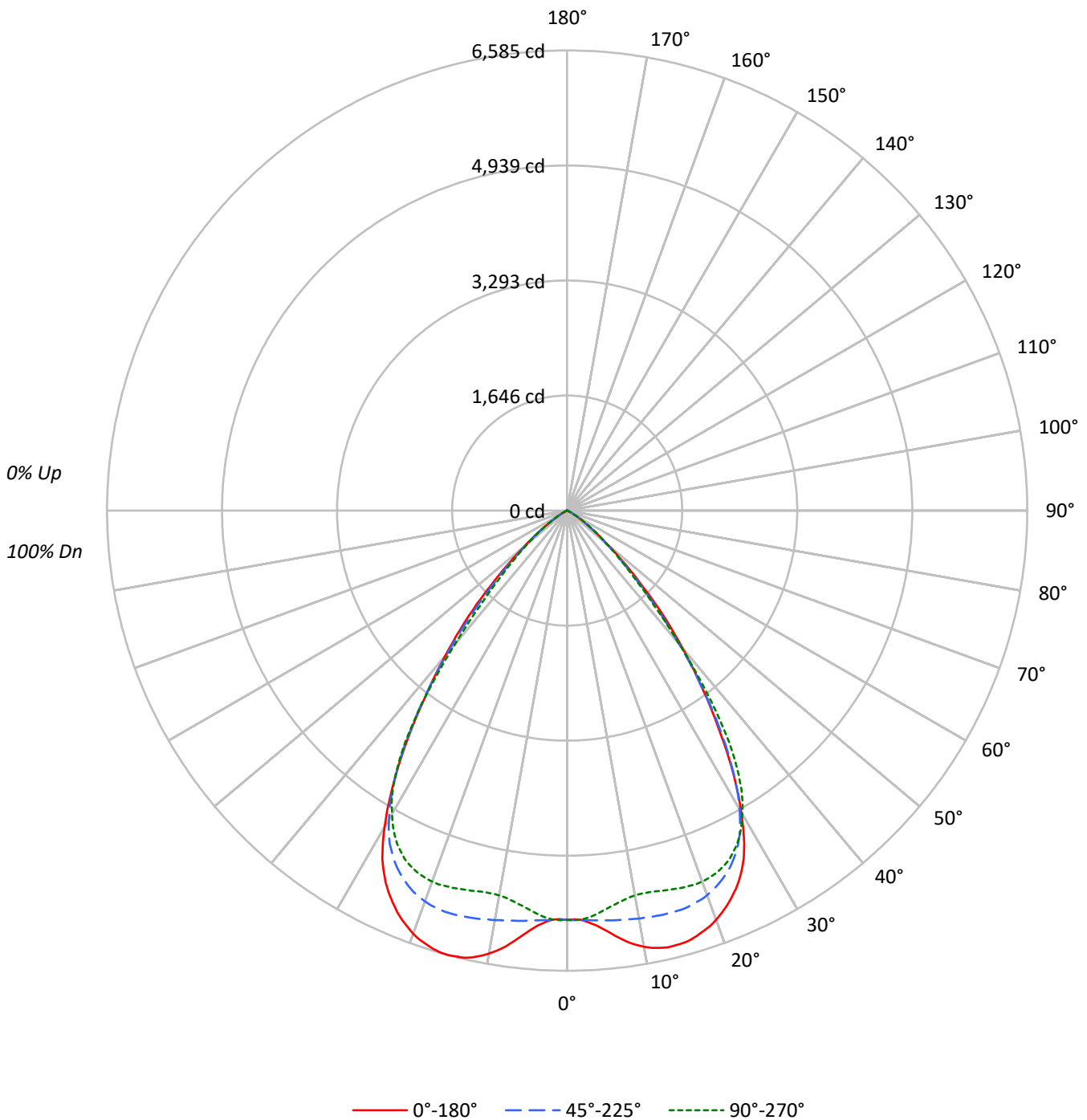
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	66	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°	180639	180639	180639
5°	186183	178094	186492
10°	198465	175091	201584
15°	204573	179385	210207
20°	204564	185374	211505
25°	198299	187122	205414
30°	177485	178546	185988
35°	141361	151947	149233
40°	103280	100474	109189
45°	65981	58820	71733
50°	35697	34977	38325
55°	18327	18999	18327
60°	7980	7980	5828
65°	1634	2182	1817
70°	1118	1569	1794
75°	0	894	0
80°	444	444	1758
85°	0	885	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	564.6	6.4
10°-20°	1698.8	19.3
20°-30°	2585.7	29.3
30°-40°	2406.3	27.3
40°-50°	1171.2	13.3
50°-60°	333.7	3.8
60°-70°	43.6	0.5
70°-80°	6.9	0.1
80°-90°	2.1	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°	4849.2	55.0
0°-40°	7255.5	82.3
0°-60°	8760.4	99.4
0°-90°	8813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8813.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5858	5858	5858	5858	5858	
5°	6015	5883	5754	5888	6025	586
15°	6408	5943	5619	6000	6585	1803
25°	5828	5574	5500	5696	6037	2645
35°	3755	3807	4036	3994	3964	2335
45°	1513	1401	1349	1510	1645	1196
55°	341	341	353	346	341	334
65°	22	27	30	27	25	43
75°	0	2	8	2	0	5
85°	0	2	2	5	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°	5858.0	5858.0	5858.0	5858.0	5858.0	5858.0	5858.0	5858.0	5858.0
1°	5850.5	5858.0	5863.0	5860.6	5863.0	5860.6	5855.5	5845.6	5845.6
2°	5860.6	5870.5	5867.9	5863.0	5855.5	5855.5	5870.5	5850.5	5855.5
3°	5900.3	5900.3	5870.5	5843.1	5833.1	5843.1	5867.9	5882.9	5895.4
4°	5950.1	5940.2	5880.4	5818.3	5798.3	5823.2	5878.0	5925.2	5950.1
5°	6014.8	5984.9	5882.9	5788.3	5753.5	5790.8	5887.9	5977.4	6024.8
6°	6089.5	6044.6	5897.8	5756.0	5711.2	5763.5	5902.9	6039.7	6111.8
7°	6164.2	6092.0	5905.3	5731.1	5673.8	5746.0	5915.3	6109.4	6203.9
8°	6233.8	6136.7	5912.8	5708.8	5639.0	5713.7	5925.2	6171.5	6296.0
9°	6291.1	6179.0	5917.7	5691.3	5609.2	5693.8	5937.7	6226.3	6373.1
10°	6338.3	6211.4	5927.8	5681.3	5591.8	5683.9	5950.1	6273.7	6437.9
11°	6375.7	6233.8	5930.2	5676.4	5584.3	5676.4	5960.0	6320.9	6492.7
12°	6398.0	6253.7	5937.7	5678.9	5586.8	5683.9	5975.0	6340.9	6537.4
13°	6413.0	6261.2	5942.6	5686.3	5591.8	5688.8	5984.9	6358.3	6567.2
14°	6413.0	6256.3	5942.6	5693.8	5606.7	5698.7	5992.4	6370.7	6574.7
15°	6408.1	6253.7	5942.6	5706.2	5619.1	5708.8	5999.9	6378.1	6584.6
16°	6393.1	6238.7	5940.2	5713.7	5631.5	5718.7	6002.3	6373.1	6577.3
17°	6363.2	6231.4	5930.2	5721.2	5644.0	5728.6	6002.3	6360.7	6559.8
18°	6323.3	6179.0	5905.3	5713.7	5646.5	5726.2	5987.5	6328.4	6527.5
19°	6288.5	6149.2	5887.9	5708.8	5656.4	5733.7	5977.4	6305.9	6492.7
20°	6233.8	6099.4	5858.0	5693.8	5649.0	5718.7	5952.6	6266.2	6445.3
21°	6166.6	6042.2	5815.7	5668.9	5636.5	5698.7	5917.7	6211.4	6380.6
22°	6099.4	5977.4	5770.9	5644.0	5616.7	5681.3	5880.4	6154.1	6313.4
23°	6019.7	5905.3	5713.7	5601.7	5586.8	5641.6	5828.2	6092.0	6233.8
24°	5930.2	5820.7	5651.5	5554.4	5549.5	5599.3	5768.5	6009.8	6139.3
25°	5828.2	5731.1	5574.4	5494.7	5499.7	5542.0	5696.3	5917.7	6037.3
26°	5706.2	5616.7	5484.7	5422.6	5430.0	5472.4	5614.1	5810.8	5925.2
27°	5569.4	5487.2	5380.3	5335.4	5355.4	5392.7	5514.7	5693.8	5785.9
28°	5397.7	5332.9	5255.8	5235.9	5260.8	5303.1	5405.2	5551.9	5634.1
29°	5198.6	5163.7	5104.0	5113.9	5148.8	5183.6	5268.2	5375.2	5440.0
30°	4984.6	4969.6	4934.8	4974.6	5014.4	5044.3	5101.6	5173.7	5223.4
31°	4765.6	4748.2	4753.1	4817.8	4877.5	4897.4	4929.8	4964.6	5002.0
32°	4519.2	4514.2	4534.1	4628.7	4705.9	4715.8	4718.3	4728.2	4748.2
33°	4267.9	4260.4	4300.2	4417.2	4504.3	4511.8	4491.8	4481.8	4496.8
34°	4006.6	4006.6	4058.8	4180.8	4282.8	4290.2	4250.5	4245.4	4230.5
35°	3755.2	3747.7	3807.4	3922.0	4036.4	4038.9	3994.1	3966.7	3964.3
37.5°	3133.0	3120.6	3140.5	3200.2	3284.8	3329.7	3324.7	3314.8	3307.3
40°	2565.7	2535.9	2496.0	2471.1	2496.0	2588.1	2667.7	2705.1	2712.5
42.5°	2030.7	1988.4	1903.8	1834.0	1844.1	1928.7	2050.6	2135.2	2177.5
45°	1513.0	1470.7	1401.0	1348.8	1348.8	1408.5	1510.5	1597.6	1644.9
47.5°	1080.0	1052.7	1012.8	990.4	1005.4	1030.2	1087.5	1152.2	1172.1
50°	744.1	736.6	714.2	714.2	729.1	749.1	759.0	791.4	798.9
52.5°	520.1	507.6	510.1	512.7	525.1	527.6	542.5	535.0	547.5
55°	340.9	340.9	340.9	348.4	353.4	353.4	345.9	340.9	340.9
57.5°	216.5	211.5	214.0	219.0	219.0	211.5	199.1	196.6	184.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	129.4	129.4	131.9	131.9	129.4	121.9	109.5	99.6	94.5
62.5°	67.2	69.7	69.7	82.1	69.7	62.2	57.3	44.8	42.3
65°	22.4	27.3	27.3	27.3	29.9	27.3	27.3	24.9	24.9
67.5°	15.0	17.4	17.4	19.9	19.9	19.9	19.9	24.9	17.4
70°	12.4	12.4	15.0	17.4	17.4	19.9	15.0	12.4	19.9
72.5°	7.5	9.9	7.5	12.4	9.9	9.9	9.9	9.9	9.9
75°	0.0	5.0	2.5	0.0	7.5	5.0	2.5	5.0	0.0
77.5°	2.5	2.5	2.5	2.5	5.0	5.0	5.0	5.0	2.5
80°	2.5	2.5	5.0	2.5	2.5	5.0	0.0	0.0	9.9
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	0.0	2.5	2.5
85°	0.0	2.5	2.5	2.5	2.5	2.5	5.0	5.0	0.0
87.5°	0.0	2.5	0.0	2.5	0.0	0.0	0.0	5.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)