

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: P247423

Luminaire Tested: **LSR8B90D010 EC8B909727 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247423  
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 EC8B909727 8LBW0WH  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6824.0 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.12  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

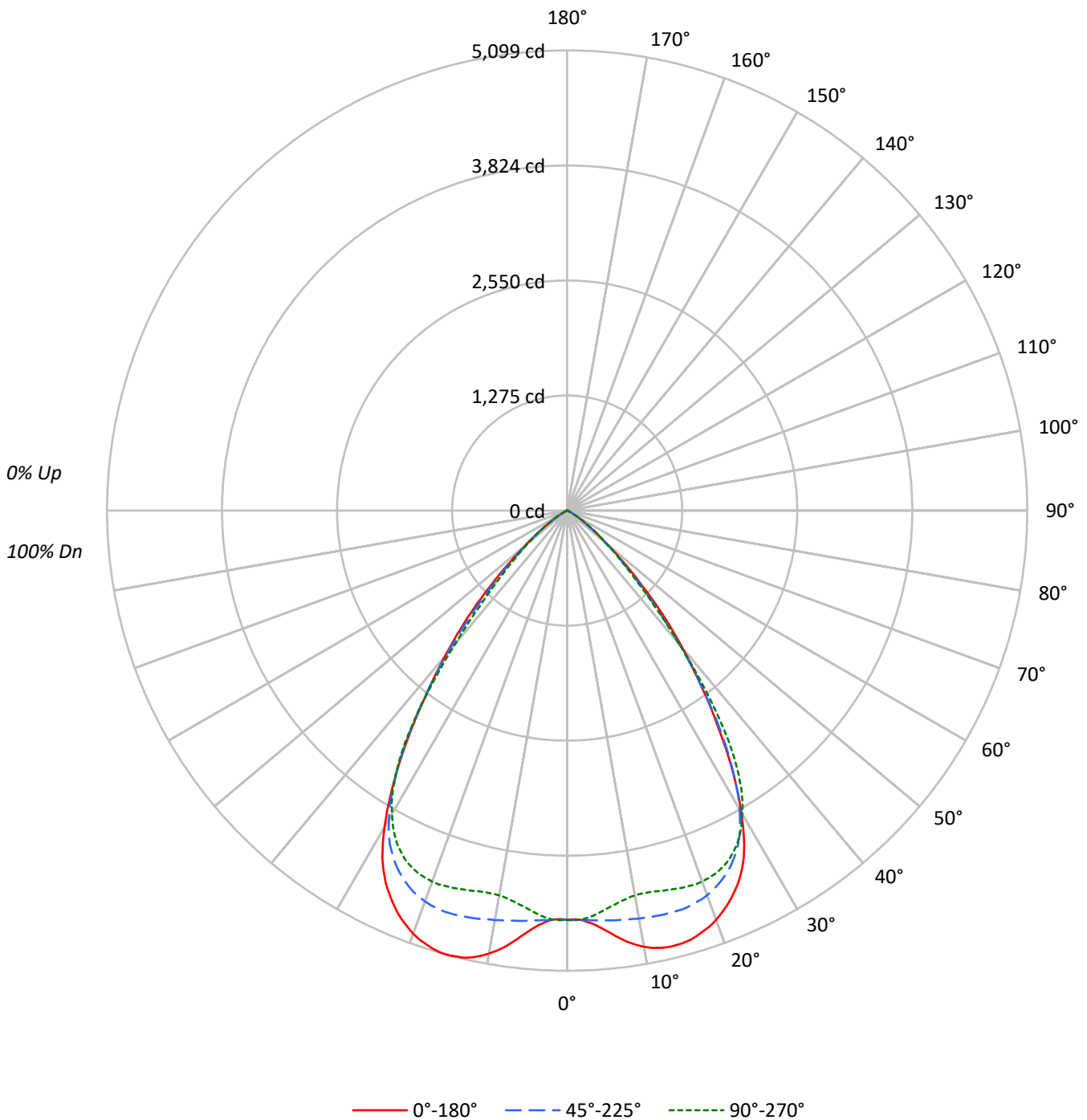
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	437.2	6.4
10°-20°	1315.4	19.3
20°-30°	2002.2	29.3
30°-40°	1863.2	27.3
40°-50°	906.8	13.3
50°-60°	258.4	3.8
60°-70°	33.8	0.5
70°-80°	5.3	0.1
80°-90°	1.6	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°	3754.8	55.0
0°-40°	5618.0	82.3
0°-60°	6783.3	99.4
0°-90°	6824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6824.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4536	4536	4536	4536	4536	
5°	4657	4555	4455	4559	4665	454
15°	4962	4601	4351	4646	5099	1396
25°	4513	4316	4258	4411	4675	2048
35°	2908	2948	3125	3093	3070	1808
45°	1172	1085	1044	1170	1274	926
55°	264	264	274	268	264	259
65°	17	21	23	21	19	33
75°	0	2	6	2	0	4
85°	0	2	2	4	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°	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9
1°	4530.1	4535.9	4539.8	4537.9	4539.8	4537.9	4534.0	4526.3	4526.3
2°	4537.9	4545.6	4543.6	4539.8	4534.0	4534.0	4545.6	4530.1	4534.0
3°	4568.7	4568.7	4545.6	4524.4	4516.6	4524.4	4543.6	4555.2	4564.9
4°	4607.2	4599.5	4553.3	4505.1	4489.7	4508.9	4551.4	4587.9	4607.2
5°	4657.3	4634.2	4555.2	4482.0	4455.0	4483.9	4559.1	4628.4	4665.0
6°	4715.2	4680.4	4566.8	4456.9	4422.3	4462.7	4570.7	4676.6	4732.5
7°	4773.0	4717.1	4572.6	4437.6	4393.3	4449.2	4580.2	4730.5	4803.8
8°	4826.9	4751.7	4578.3	4420.4	4366.3	4424.2	4587.9	4778.7	4875.1
9°	4871.2	4784.5	4582.2	4406.9	4343.3	4408.8	4597.6	4821.1	4934.8
10°	4907.8	4809.5	4589.9	4399.1	4329.8	4401.1	4607.2	4857.8	4984.9
11°	4936.8	4826.9	4591.8	4395.3	4324.0	4395.3	4614.9	4894.3	5027.3
12°	4954.1	4842.3	4597.6	4397.2	4325.9	4401.1	4626.5	4909.8	5062.0
13°	4965.6	4848.1	4601.4	4403.0	4329.8	4404.9	4634.2	4923.3	5085.1
14°	4965.6	4844.3	4601.4	4408.8	4341.4	4412.6	4640.0	4932.9	5090.9
15°	4961.8	4842.3	4601.4	4418.4	4351.0	4420.4	4645.8	4938.7	5098.6
16°	4950.2	4830.7	4599.5	4424.2	4360.6	4428.0	4647.7	4934.8	5092.8
17°	4927.1	4825.0	4591.8	4430.0	4370.2	4435.7	4647.7	4925.2	5079.3
18°	4896.2	4784.5	4572.6	4424.2	4372.1	4433.8	4636.2	4900.1	5054.3
19°	4869.3	4761.4	4559.1	4420.4	4379.8	4439.6	4628.4	4882.7	5027.3
20°	4826.9	4722.9	4535.9	4408.8	4374.1	4428.0	4609.2	4852.0	4990.7
21°	4774.9	4678.5	4503.2	4389.5	4364.4	4412.6	4582.2	4809.5	4940.6
22°	4722.9	4628.4	4468.5	4370.2	4349.1	4399.1	4553.3	4765.2	4888.5
23°	4661.1	4572.6	4424.2	4337.5	4325.9	4368.3	4512.8	4717.1	4826.9
24°	4591.8	4507.0	4376.0	4300.8	4297.0	4335.6	4466.6	4653.5	4753.7
25°	4512.8	4437.6	4316.3	4254.6	4258.5	4291.2	4410.7	4582.2	4674.7
26°	4418.4	4349.1	4246.9	4198.8	4204.5	4237.3	4347.1	4499.3	4587.9
27°	4312.4	4248.8	4166.0	4131.3	4146.7	4175.6	4270.1	4408.8	4480.1
28°	4179.5	4129.4	4069.6	4054.2	4073.5	4106.3	4185.3	4298.9	4362.5
29°	4025.3	3998.3	3952.1	3959.8	3986.7	4013.7	4079.2	4162.1	4212.2
30°	3859.6	3848.0	3821.1	3851.9	3882.7	3905.9	3950.2	4006.0	4044.6
31°	3690.0	3676.6	3680.4	3730.5	3776.7	3792.1	3817.2	3844.1	3873.1
32°	3499.3	3495.4	3510.8	3584.1	3643.8	3651.5	3653.4	3661.1	3676.6
33°	3304.7	3298.9	3329.7	3420.3	3487.7	3493.5	3478.0	3470.3	3481.9
34°	3102.3	3102.3	3142.8	3237.2	3316.2	3321.9	3291.2	3287.3	3275.7
35°	2907.7	2901.9	2948.1	3036.8	3125.4	3127.4	3092.7	3071.5	3069.6
37.5°	2425.9	2416.4	2431.7	2478.0	2543.5	2578.2	2574.3	2566.6	2560.9
40°	1986.6	1963.6	1932.7	1913.4	1932.7	2004.0	2065.6	2094.6	2100.3
42.5°	1572.4	1539.6	1474.1	1420.1	1427.9	1493.4	1587.8	1653.3	1686.0
45°	1171.5	1138.8	1084.8	1044.4	1044.4	1090.6	1169.6	1237.0	1273.7
47.5°	836.3	815.1	784.2	766.9	778.5	797.7	842.1	892.2	907.6
50°	576.1	570.3	553.0	553.0	564.6	580.0	587.7	612.8	618.6
52.5°	402.8	393.1	395.0	397.0	406.6	408.5	420.0	414.3	423.9
55°	264.0	264.0	264.0	269.7	273.6	273.6	267.8	264.0	264.0
57.5°	167.7	163.8	165.7	169.6	169.6	163.8	154.2	152.2	142.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	100.2	100.2	102.2	102.2	100.2	94.4	84.8	77.1	73.2
62.5°	52.0	53.9	53.9	63.6	53.9	48.1	44.3	34.7	32.8
65°	17.4	21.2	21.2	21.2	23.2	21.2	21.2	19.3	19.3
67.5°	11.6	13.5	13.5	15.4	15.4	15.4	15.4	19.3	13.5
70°	9.6	9.6	11.6	13.5	13.5	15.4	11.6	9.6	15.4
72.5°	5.8	7.7	5.8	9.6	7.7	7.7	7.7	7.7	7.7
75°	0.0	3.9	1.9	0.0	5.8	3.9	1.9	3.9	0.0
77.5°	1.9	1.9	1.9	1.9	3.9	3.9	3.9	3.9	1.9
80°	1.9	1.9	3.9	1.9	1.9	3.9	0.0	0.0	7.7
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	0.0	1.9	1.9
85°	0.0	1.9	1.9	1.9	1.9	1.9	3.9	3.9	0.0
87.5°	0.0	1.9	0.0	1.9	0.0	0.0	0.0	3.9	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)