

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: P247411

Luminaire Tested: **LSR8B90D010 EC8B90935 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247411  
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 EC8B90935 8LBW0WH  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8357.0 lumens  
Efficiency: N/A  
Efficacy: 97.1 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

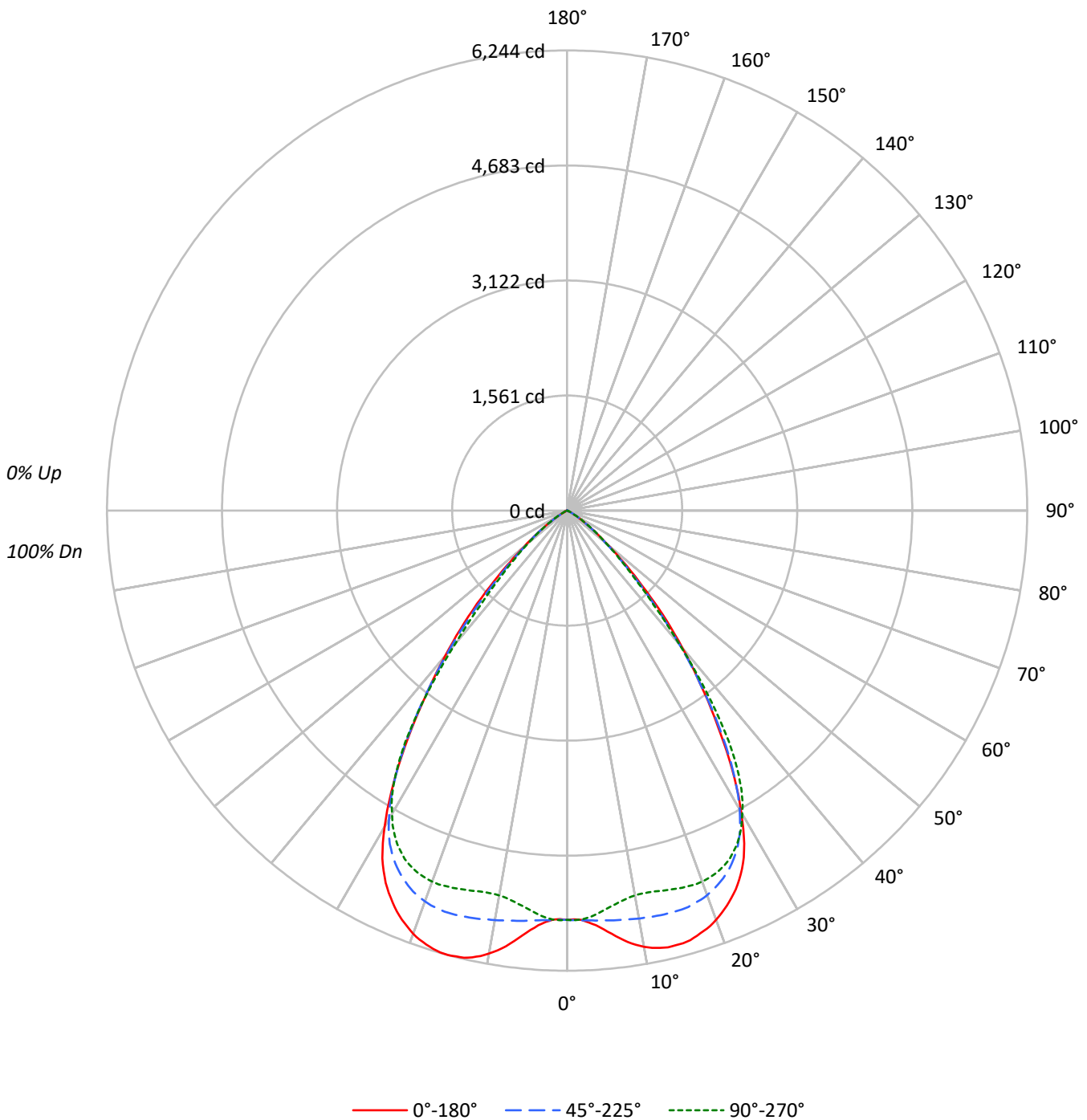
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	90°	180°
0°	171293	171293	171293
5°	176550	168879	176841
10°	188195	166032	191154
15°	193987	170104	199331
20°	193981	175785	200561
25°	188038	177439	194785
30°	168302	169306	176367
35°	134047	144083	141508
40°	97934	95277	103537
45°	62566	55776	68022
50°	33850	33168	36339
55°	17381	18015	17381
60°	7567	7567	5532
65°	1554	2072	1722
70°	1064	1488	1695
75°	0	846	0
80°	408	408	1669
85°	0	814	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	535.4	6.4
10°-20°	1610.9	19.3
20°-30°	2451.9	29.3
30°-40°	2281.8	27.3
40°-50°	1110.6	13.3
50°-60°	316.5	3.8
60°-70°	41.3	0.5
70°-80°	6.5	0.1
80°-90°	2.0	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°	4598.3	55.0
0°-40°	6880.1	82.3
0°-60°	8307.1	99.4
0°-90°	8357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8357.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5555	5555	5555	5555	5555	
5°	5704	5578	5456	5583	5713	556
15°	6076	5635	5328	5689	6244	1710
25°	5527	5286	5215	5402	5725	2509
35°	3561	3610	3828	3787	3759	2214
45°	1435	1329	1279	1432	1560	1134
55°	323	323	335	328	323	317
65°	21	26	28	26	24	41
75°	0	2	7	2	0	4
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°	5554.9	5554.9	5554.9	5554.9	5554.9	5554.9	5554.9	5554.9	5554.9
1°	5547.8	5554.9	5559.7	5557.3	5559.7	5557.3	5552.6	5543.1	5543.1
2°	5557.3	5566.7	5564.3	5559.7	5552.6	5552.6	5566.7	5547.8	5552.6
3°	5595.0	5595.0	5566.7	5540.8	5531.3	5540.8	5564.3	5578.5	5590.4
4°	5642.2	5632.8	5576.2	5517.2	5498.3	5521.9	5573.8	5618.6	5642.2
5°	5703.6	5675.2	5578.5	5488.8	5455.8	5491.2	5583.3	5668.2	5713.0
6°	5774.4	5731.9	5592.7	5458.2	5415.7	5465.2	5597.4	5727.2	5795.6
7°	5845.2	5776.7	5599.8	5434.6	5380.3	5448.7	5609.2	5793.3	5882.9
8°	5911.3	5819.2	5606.9	5413.4	5347.2	5418.0	5618.6	5852.2	5970.2
9°	5965.6	5859.3	5611.5	5396.9	5319.0	5399.2	5630.5	5904.2	6043.4
10°	6010.3	5890.0	5621.0	5387.3	5302.5	5389.8	5642.2	5949.1	6104.8
11°	6045.8	5911.3	5623.4	5382.7	5295.4	5382.7	5651.6	5993.8	6156.7
12°	6067.0	5930.1	5630.5	5385.0	5297.7	5389.8	5665.8	6012.8	6199.2
13°	6081.2	5937.2	5635.1	5392.1	5302.5	5394.4	5675.2	6029.3	6227.4
14°	6081.2	5932.5	5635.1	5399.2	5316.6	5403.9	5682.3	6041.0	6234.5
15°	6076.5	5930.1	5635.1	5411.0	5328.4	5413.4	5689.4	6048.1	6243.9
16°	6062.3	5915.9	5632.8	5418.0	5340.1	5422.8	5691.8	6043.4	6236.9
17°	6033.9	5908.9	5623.4	5425.1	5352.0	5432.2	5691.8	6031.6	6220.3
18°	5996.2	5859.3	5599.8	5418.0	5354.3	5429.9	5677.7	6000.9	6189.7
19°	5963.1	5831.0	5583.3	5413.4	5363.7	5437.0	5668.2	5979.7	6156.7
20°	5911.3	5783.8	5554.9	5399.2	5356.8	5422.8	5644.6	5942.0	6111.8
21°	5847.6	5729.5	5514.8	5375.6	5344.9	5403.9	5611.5	5890.0	6050.5
22°	5783.8	5668.2	5472.3	5352.0	5326.1	5387.3	5576.2	5835.7	5986.7
23°	5708.3	5599.8	5418.0	5311.9	5297.7	5349.7	5526.6	5776.7	5911.3
24°	5623.4	5519.5	5359.1	5267.0	5262.3	5309.5	5470.0	5698.8	5821.6
25°	5526.6	5434.6	5285.9	5210.4	5215.1	5255.3	5401.5	5611.5	5724.9
26°	5411.0	5326.1	5201.0	5142.0	5149.1	5189.2	5323.6	5510.1	5618.6
27°	5281.2	5203.3	5101.9	5059.3	5078.3	5113.6	5229.3	5399.2	5486.5
28°	5118.4	5057.0	4983.9	4965.0	4988.6	5028.7	5125.5	5264.7	5342.6
29°	4929.6	4896.5	4839.9	4849.3	4882.4	4915.4	4995.6	5097.1	5158.5
30°	4726.7	4712.5	4679.5	4717.2	4754.9	4783.3	4837.6	4906.0	4953.2
31°	4519.0	4502.5	4507.2	4568.5	4625.2	4644.0	4674.7	4707.7	4743.2
32°	4285.4	4280.6	4299.5	4389.2	4462.4	4471.8	4474.1	4483.5	4502.5
33°	4047.0	4040.0	4077.7	4188.7	4271.2	4278.3	4259.4	4249.9	4264.1
34°	3799.3	3799.3	3848.8	3964.5	4061.2	4068.2	4030.5	4025.8	4011.6
35°	3560.9	3553.8	3610.4	3719.0	3827.5	3830.0	3787.4	3761.5	3759.1
37.5°	2970.9	2959.2	2978.0	3034.7	3114.9	3157.4	3152.7	3143.2	3136.2
40°	2432.9	2404.7	2366.9	2343.3	2366.9	2454.2	2529.7	2565.1	2572.1
42.5°	1925.6	1885.5	1805.3	1739.1	1748.6	1828.9	1944.5	2024.7	2064.8
45°	1434.7	1394.6	1328.6	1279.0	1279.0	1335.6	1432.4	1514.9	1559.8
47.5°	1024.1	998.2	960.4	939.2	953.3	976.9	1031.2	1092.6	1111.5
50°	705.6	698.5	677.3	677.3	691.4	710.3	719.7	750.4	757.5
52.5°	493.2	481.4	483.7	486.1	497.9	500.3	514.4	507.3	519.2
55°	323.3	323.3	323.3	330.3	335.1	335.1	328.0	323.3	323.3
57.5°	205.3	200.6	202.9	207.7	207.7	200.6	188.8	186.4	174.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	122.7	122.7	125.1	125.1	122.7	115.6	103.8	94.4	89.7
62.5°	63.7	66.0	66.0	77.9	66.0	59.0	54.3	42.4	40.1
65°	21.3	25.9	25.9	25.9	28.4	25.9	25.9	23.6	23.6
67.5°	14.2	16.5	16.5	18.8	18.8	18.8	18.8	23.6	16.5
70°	11.8	11.8	14.2	16.5	16.5	18.8	14.2	11.8	18.8
72.5°	7.1	9.4	7.1	11.8	9.4	9.4	9.4	9.4	9.4
75°	0.0	4.8	2.3	0.0	7.1	4.8	2.3	4.8	0.0
77.5°	2.3	2.3	2.3	2.3	4.8	4.8	4.8	4.8	2.3
80°	2.3	2.3	4.8	2.3	2.3	4.8	0.0	0.0	9.4
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	0.0	2.3	2.3
85°	0.0	2.3	2.3	2.3	2.3	2.3	4.8	4.8	0.0
87.5°	0.0	2.3	0.0	2.3	0.0	0.0	0.0	4.8	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)