

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: P250190

Luminaire Tested: **LSR8B80D010 EC8B80927 8LBM0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250190  
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: LSR8B80D010 EC8B80927 8LBM0WH  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6576.7 lumens  
Efficiency: N/A  
Efficacy: 88.4 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.8 / 0.85  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

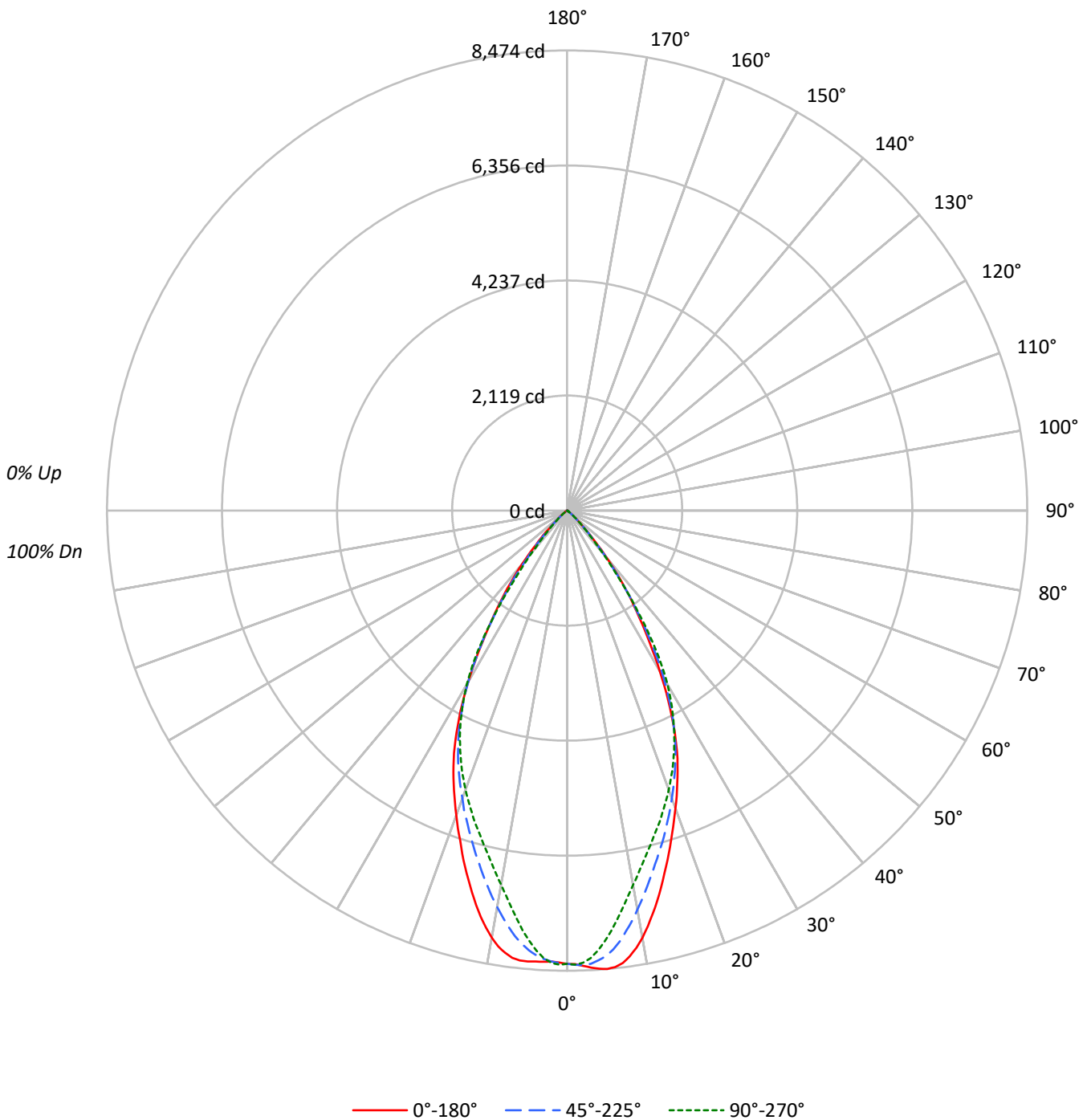
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**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°	757.7	11.5
10°-20°	1832.6	27.9
20°-30°	2147.9	32.7
30°-40°	1413.2	21.5
40°-50°	368.8	5.6
50°-60°	45.4	0.7
60°-70°	9.4	0.1
70°-80°	1.7	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°	4738.2	72.0
0°-40°	6151.4	93.5
0°-60°	6565.5	99.8
0°-90°	6576.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6576.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8346	8346	8346	8346	8346	
5°	8474	8233	7961	8125	8336	794
15°	6918	6526	6194	6526	7036	1928
25°	4753	4706	4671	4750	4927	2143
35°	2161	2210	2285	2307	2344	1353
45°	420	396	369	428	499	376
55°	32	34	39	39	37	43
65°	12	10	10	8	8	8
75°	0	2	0	0	0	1
85°	0	0	0	0	0	0
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°	8346.5	8346.5	8346.5	8346.5	8346.5	8346.5	8346.5	8346.5	8346.5
1°	8352.6	8364.7	8368.8	8381.0	8362.7	8350.5	8334.3	8322.1	8324.1
2°	8389.1	8395.2	8372.8	8364.7	8332.3	8322.1	8309.9	8307.9	8309.9
3°	8427.7	8415.4	8356.6	8301.8	8253.1	8247.0	8269.4	8301.8	8320.1
4°	8458.1	8425.6	8301.8	8200.4	8123.3	8117.2	8206.4	8289.7	8324.1
5°	8474.3	8415.4	8232.9	8062.3	7961.0	7999.4	8125.3	8273.4	8336.2
6°	8452.0	8364.7	8127.3	7900.1	7784.3	7835.1	8019.8	8234.9	8328.3
7°	8395.2	8283.6	7991.3	7723.5	7581.4	7660.6	7895.9	8169.9	8297.8
8°	8289.7	8155.7	7818.9	7518.5	7378.5	7467.8	7743.8	8076.6	8224.8
9°	8151.6	8003.5	7648.4	7331.8	7181.7	7287.2	7585.5	7952.7	8123.3
10°	7987.3	7829.0	7459.6	7137.0	7001.1	7100.4	7415.0	7808.7	7985.2
11°	7794.4	7642.4	7271.0	6954.4	6824.5	6921.9	7244.6	7636.3	7827.0
12°	7585.5	7445.5	7078.2	6777.8	6656.1	6749.4	7062.0	7457.6	7646.4
13°	7376.4	7236.4	6891.5	6607.4	6495.8	6585.1	6883.3	7262.9	7451.6
14°	7151.2	7023.4	6704.8	6445.0	6343.5	6428.8	6700.7	7066.0	7244.6
15°	6917.8	6816.4	6526.2	6288.8	6193.5	6274.6	6526.2	6863.1	7035.5
16°	6698.7	6605.3	6353.7	6134.5	6055.4	6120.3	6349.7	6660.1	6824.5
17°	6475.5	6390.2	6181.2	5982.3	5911.3	5974.2	6169.0	6455.1	6603.3
18°	6252.3	6181.2	5992.5	5822.1	5759.1	5815.9	5990.5	6248.1	6382.1
19°	6045.3	5980.3	5820.1	5676.0	5619.2	5669.8	5834.2	6049.3	6183.2
20°	5832.2	5779.3	5639.4	5521.7	5469.0	5515.7	5643.4	5852.5	5970.2
21°	5627.2	5580.6	5458.8	5359.4	5316.8	5355.3	5473.0	5661.7	5765.2
22°	5414.2	5387.7	5278.2	5195.0	5166.6	5190.9	5298.4	5460.9	5558.3
23°	5205.2	5180.7	5097.6	5028.6	5004.2	5028.6	5123.9	5270.1	5357.4
24°	4994.1	4967.8	4906.8	4862.1	4841.9	4862.1	4943.4	5067.1	5150.4
25°	4752.7	4748.5	4706.0	4681.6	4671.4	4693.7	4750.5	4858.1	4927.0
26°	4521.3	4509.1	4497.0	4492.8	4494.8	4507.1	4553.7	4634.9	4689.7
27°	4237.2	4255.4	4273.7	4298.1	4306.2	4316.3	4338.6	4397.4	4438.0
28°	3965.2	3999.7	4044.4	4093.1	4115.5	4115.5	4117.4	4149.9	4184.4
29°	3695.4	3731.8	3803.0	3876.0	3906.3	3902.3	3886.1	3900.3	3920.6
30°	3413.2	3459.9	3555.3	3650.7	3695.4	3679.1	3648.7	3634.4	3646.7
31°	3137.3	3184.0	3289.5	3393.0	3451.8	3433.6	3380.8	3370.6	3376.7
32°	2873.5	2920.2	3017.6	3127.2	3194.1	3169.8	3114.9	3098.7	3100.7
33°	2617.8	2654.3	2743.6	2845.1	2899.8	2893.7	2849.1	2828.8	2830.8
34°	2376.3	2406.7	2473.6	2550.8	2603.6	2601.6	2569.0	2571.1	2577.3
35°	2161.2	2177.4	2209.8	2252.5	2285.0	2303.2	2307.3	2323.6	2343.8
37.5°	1633.6	1639.7	1601.1	1558.5	1550.4	1603.1	1694.5	1773.6	1804.0
40°	1132.3	1118.1	1069.4	994.4	972.0	1031.0	1146.6	1258.2	1298.7
42.5°	704.1	698.1	667.7	610.9	590.5	625.1	712.2	797.5	838.1
45°	420.1	412.0	395.7	373.4	369.3	383.5	428.2	476.9	499.2
47.5°	241.4	239.5	229.3	221.2	219.2	229.3	249.6	278.0	284.1
50°	131.8	129.9	127.9	127.9	127.9	133.9	144.1	152.2	156.3
52.5°	64.9	66.9	64.9	66.9	69.0	73.0	71.0	79.2	79.2
55°	32.5	30.5	34.5	38.6	38.6	38.6	38.6	38.6	36.6
57.5°	24.3	26.3	22.4	24.3	22.4	22.4	20.4	22.4	24.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	16.2	14.2	16.2	18.2	20.4	18.2	14.2	16.2	18.2
62.5°	8.1	8.1	8.1	12.2	18.2	14.2	12.2	10.1	10.1
65°	12.2	8.1	10.1	12.2	10.1	10.1	8.1	10.1	8.1
67.5°	6.1	10.1	6.1	4.0	6.1	8.1	6.1	4.0	4.0
70°	0.0	2.0	2.0	6.1	6.1	6.1	6.1	4.0	4.0
72.5°	2.0	2.0	2.0	4.0	2.0	4.0	2.0	2.0	4.0
75°	0.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0
77.5°	2.0	0.0	2.0	2.0	0.0	0.0	0.0	2.0	0.0
80°	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0
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)