

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: P250121

Luminaire Tested: **LSR8B90D010 EC8B90827 8LBM0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250121  
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: LSR8B90D010 EC8B90827 8LBM0WH  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8871.0 lumens  
Efficiency: N/A  
Efficacy: 103.0 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.8 / 0.85  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

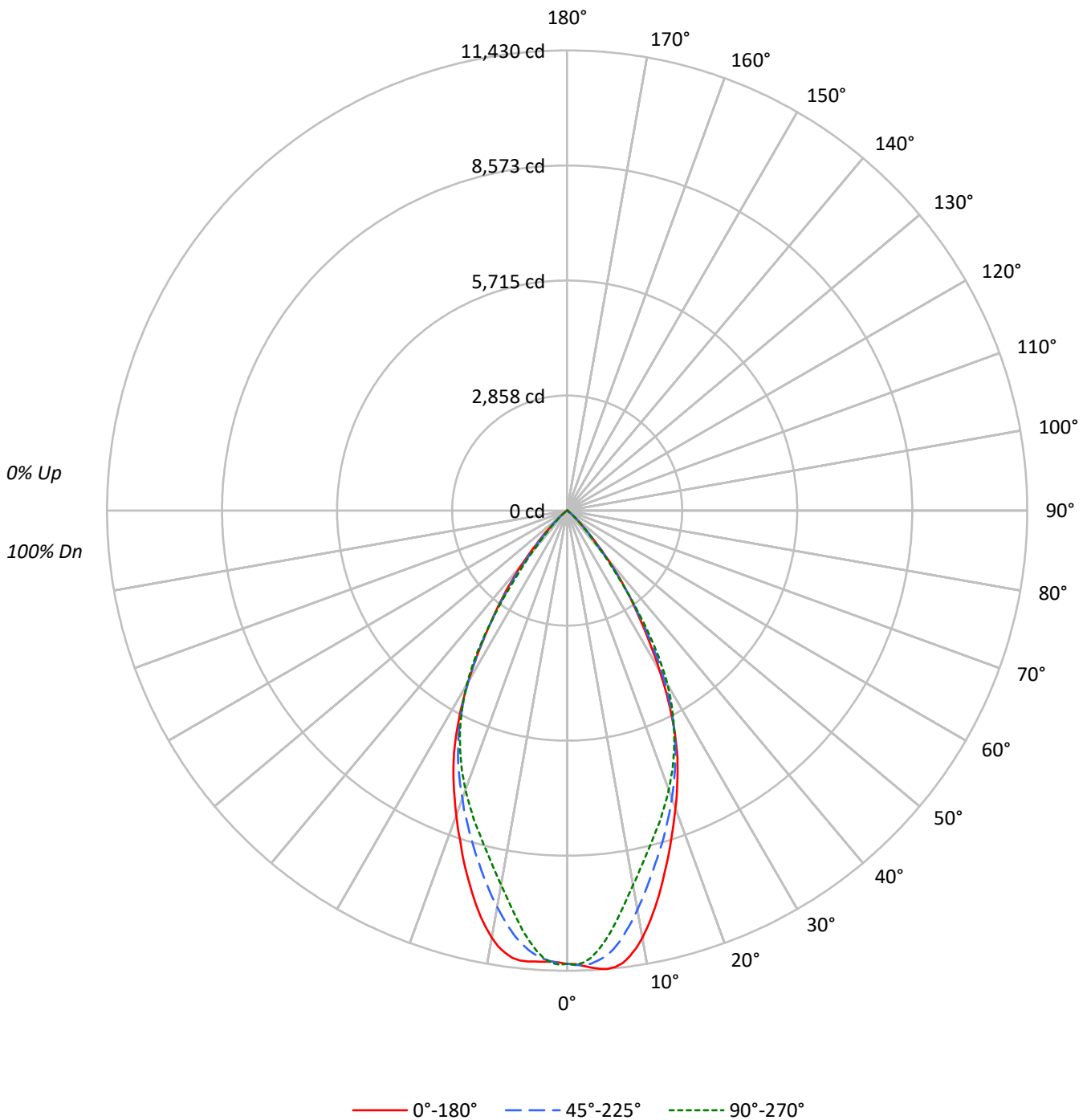
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	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	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	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	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	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	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	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	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	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	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	52	52	52		

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

	0°	90°	180°
0°	347158	347158	347158
5°	353821	332385	348060
10°	337343	295689	337259
15°	297887	266691	302953
20°	258148	242069	264255
25°	218112	214386	226121
30°	163933	177478	175139
35°	109737	116023	119012
40°	61484	52777	70517
45°	24709	21726	29366
50°	8534	8275	10113
55°	2355	2796	2650
60°	1351	1690	1517
65°	1197	1000	795
70°	0	739	496
75°	0	0	0
80°	0	0	479
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1022.0	11.5
10°-20°	2471.9	27.9
20°-30°	2897.2	32.7
30°-40°	1906.2	21.5
40°-50°	497.4	5.6
50°-60°	61.2	0.7
60°-70°	12.7	0.1
70°-80°	2.3	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°	6391.1	72.0
0°-40°	8297.3	93.5
0°-60°	8855.9	99.8
0°-90°	8871.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8871.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	11258	11258	11258	11258	11258	
5°	11430	11105	10738	10960	11244	###
15°	9331	8803	8354	8803	9490	2601
25°	6410	6348	6301	6408	6646	2890
35°	2915	2981	3082	3112	3162	1825
45°	567	534	498	578	673	508
55°	44	46	52	52	49	58
65°	16	14	14	11	11	11
75°	0	3	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°	11258.1	11258.1	11258.1	11258.1	11258.1	11258.1	11258.1	11258.1	11258.1
1°	11266.3	11282.7	11288.2	11304.6	11280.0	11263.6	11241.7	11225.2	11228.0
2°	11315.6	11323.8	11293.7	11282.7	11238.9	11225.2	11208.8	11206.1	11208.8
3°	11367.6	11351.1	11271.8	11197.9	11132.2	11123.9	11154.1	11197.9	11222.5
4°	11408.6	11364.8	11197.9	11061.0	10957.0	10948.8	11069.2	11181.4	11228.0
5°	11430.5	11351.1	11104.8	10874.9	10738.0	10790.0	10959.7	11159.5	11244.4
6°	11400.4	11282.7	10962.5	10655.9	10499.9	10568.3	10817.4	11107.5	11233.4
7°	11323.8	11173.2	10779.1	10417.8	10226.1	10332.9	10650.4	11019.9	11192.4
8°	11181.4	11000.8	10546.4	10141.3	9952.4	10072.8	10445.2	10894.0	11093.9
9°	10995.3	10795.5	10316.5	9889.5	9686.9	9829.3	10231.6	10727.0	10957.0
10°	10773.6	10560.1	10061.9	9626.7	9443.3	9577.4	10001.7	10532.7	10770.9
11°	10513.5	10308.3	9807.4	9380.4	9205.2	9336.6	9771.8	10300.1	10557.3
12°	10231.6	10042.8	9547.4	9142.2	8978.0	9103.9	9525.5	10059.2	10313.7
13°	9949.7	9760.8	9295.5	8912.3	8761.7	8882.2	9284.6	9796.4	10050.9
14°	9645.9	9473.4	9043.7	8693.3	8556.5	8671.4	9038.2	9530.9	9771.8
15°	9331.1	9194.2	8802.8	8482.5	8353.9	8463.4	8802.8	9257.2	9489.8
16°	9035.5	8909.6	8570.1	8274.5	8167.8	8255.4	8564.7	8983.5	9205.2
17°	8734.4	8619.4	8337.5	8069.2	7973.5	8058.3	8321.1	8707.0	8906.8
18°	8433.3	8337.5	8083.0	7853.0	7768.2	7844.8	8080.2	8427.8	8608.4
19°	8154.1	8066.5	7850.3	7655.9	7579.3	7647.7	7869.4	8159.6	8340.2
20°	7866.7	7795.5	7606.6	7447.9	7376.7	7439.7	7612.1	7894.1	8052.8
21°	7590.2	7527.3	7363.1	7228.9	7171.4	7223.5	7382.2	7636.8	7776.4
22°	7302.8	7267.3	7119.5	7007.2	6968.9	7001.7	7146.8	7365.8	7497.2
23°	7020.9	6988.1	6875.8	6782.8	6749.9	6782.8	6911.4	7108.5	7226.2
24°	6736.2	6700.7	6618.6	6558.3	6531.0	6558.3	6667.8	6834.8	6947.0
25°	6410.5	6405.0	6347.6	6314.7	6301.0	6331.1	6407.8	6552.9	6645.9
26°	6098.4	6082.0	6065.6	6060.1	6062.9	6079.3	6142.2	6251.7	6325.7
27°	5715.3	5739.9	5764.5	5797.4	5808.3	5822.0	5852.1	5931.5	5986.3
28°	5348.5	5395.0	5455.2	5520.9	5551.1	5551.1	5553.7	5597.5	5644.1
29°	4984.4	5033.7	5129.5	5228.0	5269.1	5263.6	5241.7	5260.9	5288.2
30°	4604.0	4666.9	4795.6	4924.2	4984.4	4962.5	4921.5	4902.3	4918.7
31°	4231.7	4294.7	4437.0	4576.6	4655.9	4631.4	4560.2	4546.5	4554.7
32°	3875.9	3938.8	4070.2	4218.0	4308.3	4275.5	4201.6	4179.7	4182.4
33°	3531.0	3580.3	3700.7	3837.6	3911.4	3903.2	3843.0	3815.7	3818.4
34°	3205.3	3246.3	3336.6	3440.7	3511.8	3509.1	3465.3	3468.0	3476.2
35°	2915.1	2937.0	2980.8	3038.3	3082.1	3106.7	3112.2	3134.1	3161.5
37.5°	2203.5	2211.6	2159.7	2102.1	2091.2	2162.4	2285.6	2392.3	2433.4
40°	1527.4	1508.2	1442.5	1341.2	1311.1	1390.5	1546.5	1697.1	1751.8
42.5°	949.8	941.6	900.5	823.9	796.5	843.1	960.8	1075.7	1130.5
45°	566.6	555.6	533.7	503.6	498.2	517.3	577.5	643.2	673.4
47.5°	325.7	323.0	309.3	298.4	295.6	309.3	336.7	375.0	383.2
50°	177.9	175.2	172.5	172.5	172.5	180.6	194.4	205.3	210.8
52.5°	87.6	90.3	87.6	90.3	93.1	98.5	95.8	106.8	106.8
55°	43.8	41.1	46.5	52.0	52.0	52.0	52.0	52.0	49.3
57.5°	32.8	35.6	30.1	32.8	30.1	30.1	27.4	30.1	32.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	21.9	19.2	21.9	24.6	27.4	24.6	19.2	21.9	24.6
62.5°	10.9	10.9	10.9	16.4	24.6	19.2	16.4	13.7	13.7
65°	16.4	10.9	13.7	16.4	13.7	13.7	10.9	13.7	10.9
67.5°	8.2	13.7	8.2	5.5	8.2	10.9	8.2	5.5	5.5
70°	0.0	2.7	2.7	8.2	8.2	8.2	8.2	5.5	5.5
72.5°	2.7	2.7	2.7	5.5	2.7	5.5	2.7	2.7	5.5
75°	0.0	0.0	2.7	2.7	0.0	2.7	0.0	0.0	0.0
77.5°	2.7	0.0	2.7	2.7	0.0	0.0	0.0	2.7	0.0
80°	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.7
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)