

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: P247399

Luminaire Tested: **LSR8B90D010 EC8B90850 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247399  
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 EC8B90850 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: 9927.1 lumens  
Efficiency: N/A  
Efficacy: 115.3 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

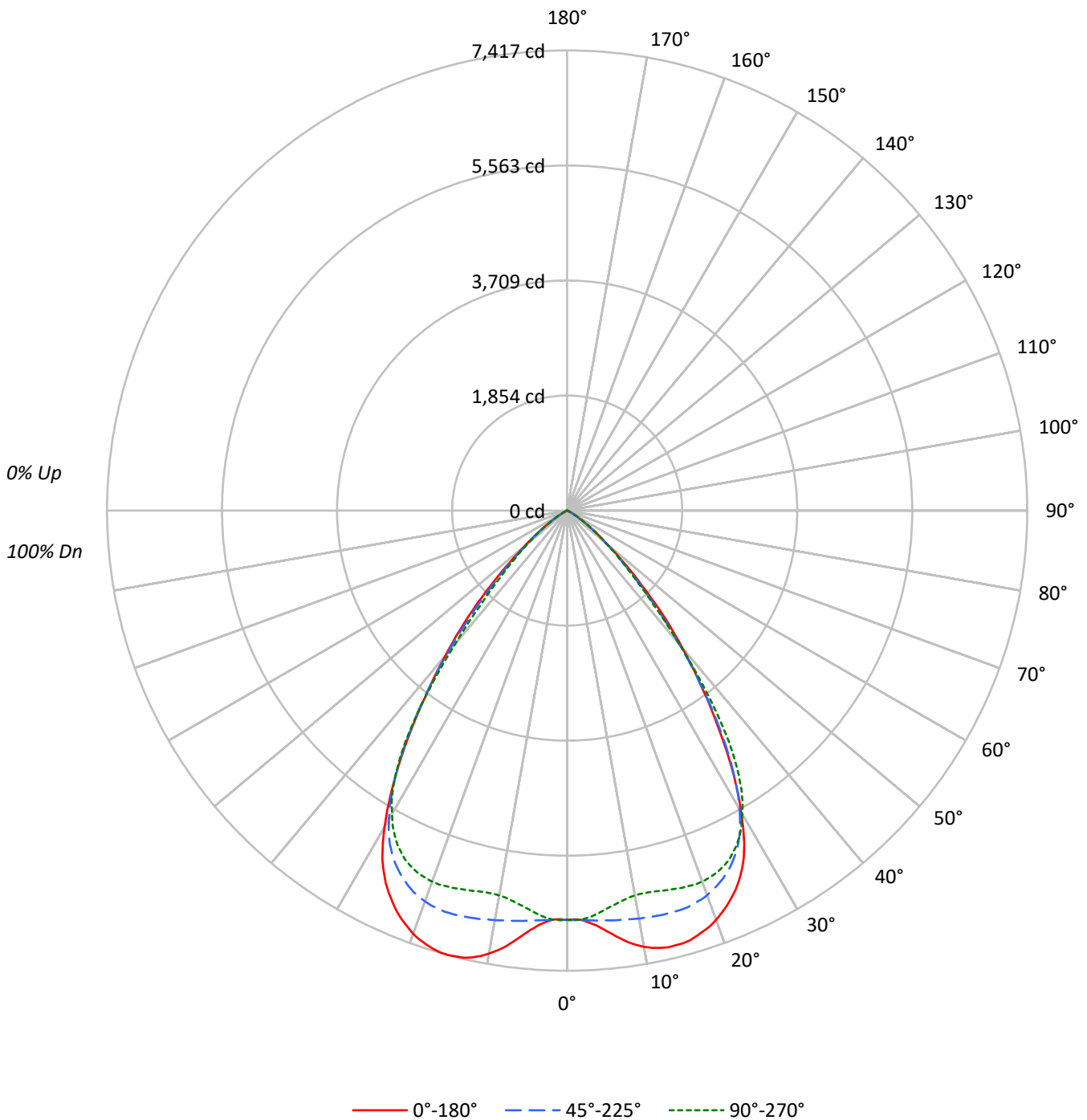
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	66	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°	203473	203473	203473
5°	209717	200607	210064
10°	223552	197222	227062
15°	230431	202060	236781
20°	230423	208807	238243
25°	223365	210776	231378
30°	199917	201114	209499
35°	159231	171153	168096
40°	116334	113174	122988
45°	74323	66255	80803
50°	40206	39400	43166
55°	20644	21402	20644
60°	8986	8986	6568
65°	1846	2459	2043
70°	1262	1767	2020
75°	0	1001	0
80°	497	497	1989
85°	0	991	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	636.0	6.4
10°-20°	1913.6	19.3
20°-30°	2912.6	29.3
30°-40°	2710.5	27.3
40°-50°	1319.2	13.3
50°-60°	375.9	3.8
60°-70°	49.1	0.5
70°-80°	7.8	0.1
80°-90°	2.4	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°	5462.2	55.0
0°-40°	8172.7	82.3
0°-60°	9867.8	99.4
0°-90°	9927.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9927.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6598	6598	6598	6598	6598	
5°	6775	6626	6481	6632	6786	660
15°	7218	6694	6329	6758	7417	2031
25°	6565	6279	6195	6416	6800	2980
35°	4230	4289	4547	4499	4465	2630
45°	1704	1578	1519	1702	1853	1347
55°	384	384	398	390	384	377
65°	25	31	34	31	28	48
75°	0	3	8	3	0	5
85°	0	3	3	6	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°	6598.5	6598.5	6598.5	6598.5	6598.5	6598.5	6598.5	6598.5	6598.5
1°	6590.1	6598.5	6604.1	6601.4	6604.1	6601.4	6595.7	6584.5	6584.5
2°	6601.4	6612.6	6609.7	6604.1	6595.7	6595.7	6612.6	6590.1	6595.7
3°	6646.1	6646.1	6612.6	6581.7	6570.4	6581.7	6609.7	6626.5	6640.6
4°	6702.2	6691.0	6623.7	6553.7	6531.2	6559.2	6621.0	6674.2	6702.2
5°	6775.1	6741.4	6626.5	6520.0	6480.8	6522.8	6632.2	6733.0	6786.3
6°	6859.2	6808.7	6643.4	6483.6	6433.1	6492.0	6649.0	6803.2	6884.4
7°	6943.3	6862.0	6651.8	6455.5	6391.0	6472.4	6663.0	6881.6	6988.1
8°	7021.8	6912.4	6660.2	6430.4	6351.8	6435.9	6674.2	6951.6	7091.8
9°	7086.3	6960.1	6665.7	6410.8	6318.2	6413.5	6688.2	7013.4	7178.7
10°	7139.5	6996.5	6677.0	6399.5	6298.6	6402.3	6702.2	7066.7	7251.6
11°	7181.6	7021.8	6679.8	6393.9	6290.2	6393.9	6713.4	7119.9	7313.4
12°	7206.8	7044.2	6688.2	6396.7	6293.0	6402.3	6730.2	7142.4	7363.8
13°	7223.6	7052.6	6693.8	6405.1	6298.6	6407.9	6741.4	7162.0	7397.4
14°	7223.6	7047.1	6693.8	6413.5	6315.5	6419.1	6749.9	7175.9	7405.8
15°	7218.1	7044.2	6693.8	6427.5	6329.4	6430.4	6758.3	7184.4	7417.0
16°	7201.2	7027.3	6691.0	6435.9	6343.4	6441.6	6761.0	7178.7	7408.7
17°	7167.5	7019.0	6679.8	6444.3	6357.5	6452.8	6761.0	7164.8	7388.9
18°	7122.6	6960.1	6651.8	6435.9	6360.2	6450.0	6744.3	7128.3	7352.6
19°	7083.4	6926.5	6632.2	6430.4	6371.4	6458.4	6733.0	7103.0	7313.4
20°	7021.8	6870.4	6598.5	6413.5	6363.1	6441.6	6705.1	7058.3	7260.1
21°	6946.1	6805.9	6550.8	6385.5	6349.0	6419.1	6665.7	6996.5	7187.1
22°	6870.4	6733.0	6500.4	6357.5	6326.6	6399.5	6623.7	6932.0	7111.4
23°	6780.7	6651.8	6435.9	6309.8	6293.0	6354.7	6564.9	6862.0	7021.8
24°	6679.8	6556.5	6365.9	6256.5	6251.0	6307.0	6497.6	6769.5	6915.3
25°	6564.9	6455.5	6279.0	6189.2	6194.9	6242.5	6416.3	6665.7	6800.4
26°	6427.5	6326.6	6178.0	6108.0	6116.4	6164.1	6323.8	6545.3	6674.2
27°	6273.3	6180.8	6060.4	6009.8	6032.3	6074.3	6211.7	6413.5	6517.3
28°	6080.0	6007.0	5920.2	5897.8	5925.8	5973.5	6088.4	6253.7	6346.3
29°	5855.7	5816.4	5749.2	5760.4	5799.6	5838.8	5934.1	6054.7	6127.6
30°	5614.6	5597.8	5558.6	5603.5	5648.2	5681.9	5746.4	5827.6	5883.7
31°	5368.0	5348.4	5353.9	5426.8	5494.1	5516.5	5552.9	5592.1	5634.3
32°	5090.5	5084.8	5107.2	5213.8	5300.7	5311.9	5314.7	5325.9	5348.4
33°	4807.3	4798.9	4843.8	4975.6	5073.6	5082.1	5059.6	5048.4	5065.2
34°	4513.0	4513.0	4571.9	4709.3	4824.2	4832.5	4787.7	4782.1	4765.2
35°	4229.9	4221.5	4288.7	4417.7	4546.6	4549.5	4498.9	4468.1	4465.4
37.5°	3529.1	3515.1	3537.5	3604.8	3700.1	3750.6	3744.9	3733.8	3725.3
40°	2890.0	2856.4	2811.5	2783.5	2811.5	2915.3	3004.9	3047.0	3055.3
42.5°	2287.4	2239.7	2144.4	2065.8	2077.2	2172.5	2309.8	2405.1	2452.7
45°	1704.3	1656.6	1578.1	1519.3	1519.3	1586.6	1701.5	1799.6	1852.9
47.5°	1216.5	1185.7	1140.9	1115.6	1132.4	1160.5	1225.0	1297.9	1320.3
50°	838.1	829.7	804.5	804.5	821.3	843.8	855.0	891.4	899.8
52.5°	585.9	571.8	574.6	577.5	591.4	594.3	611.0	602.6	616.7
55°	384.0	384.0	384.0	392.4	398.1	398.1	389.6	384.0	384.0
57.5°	243.9	238.3	241.0	246.7	246.7	238.3	224.3	221.4	207.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	145.7	145.7	148.6	148.6	145.7	137.3	123.3	112.1	106.5
62.5°	75.7	78.5	78.5	92.5	78.5	70.0	64.5	50.4	47.7
65°	25.3	30.8	30.8	30.8	33.7	30.8	30.8	28.0	28.0
67.5°	16.8	19.6	19.6	22.4	22.4	22.4	22.4	28.0	19.6
70°	14.0	14.0	16.8	19.6	19.6	22.4	16.8	14.0	22.4
72.5°	8.4	11.2	8.4	14.0	11.2	11.2	11.2	11.2	11.2
75°	0.0	5.7	2.8	0.0	8.4	5.7	2.8	5.7	0.0
77.5°	2.8	2.8	2.8	2.8	5.7	5.7	5.7	5.7	2.8
80°	2.8	2.8	5.7	2.8	2.8	5.7	0.0	0.0	11.2
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	0.0	2.8	2.8
85°	0.0	2.8	2.8	2.8	2.8	2.8	5.7	5.7	0.0
87.5°	0.0	2.8	0.0	2.8	0.0	0.0	0.0	5.7	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)