

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: P250124

Luminaire Tested: **LSR8B150D010 EC8B150827 8LBM0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250124  
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: LSR8B150D010 EC8B150827 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: 15173.0 lumens  
Efficiency: N/A  
Efficacy: 95.7 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

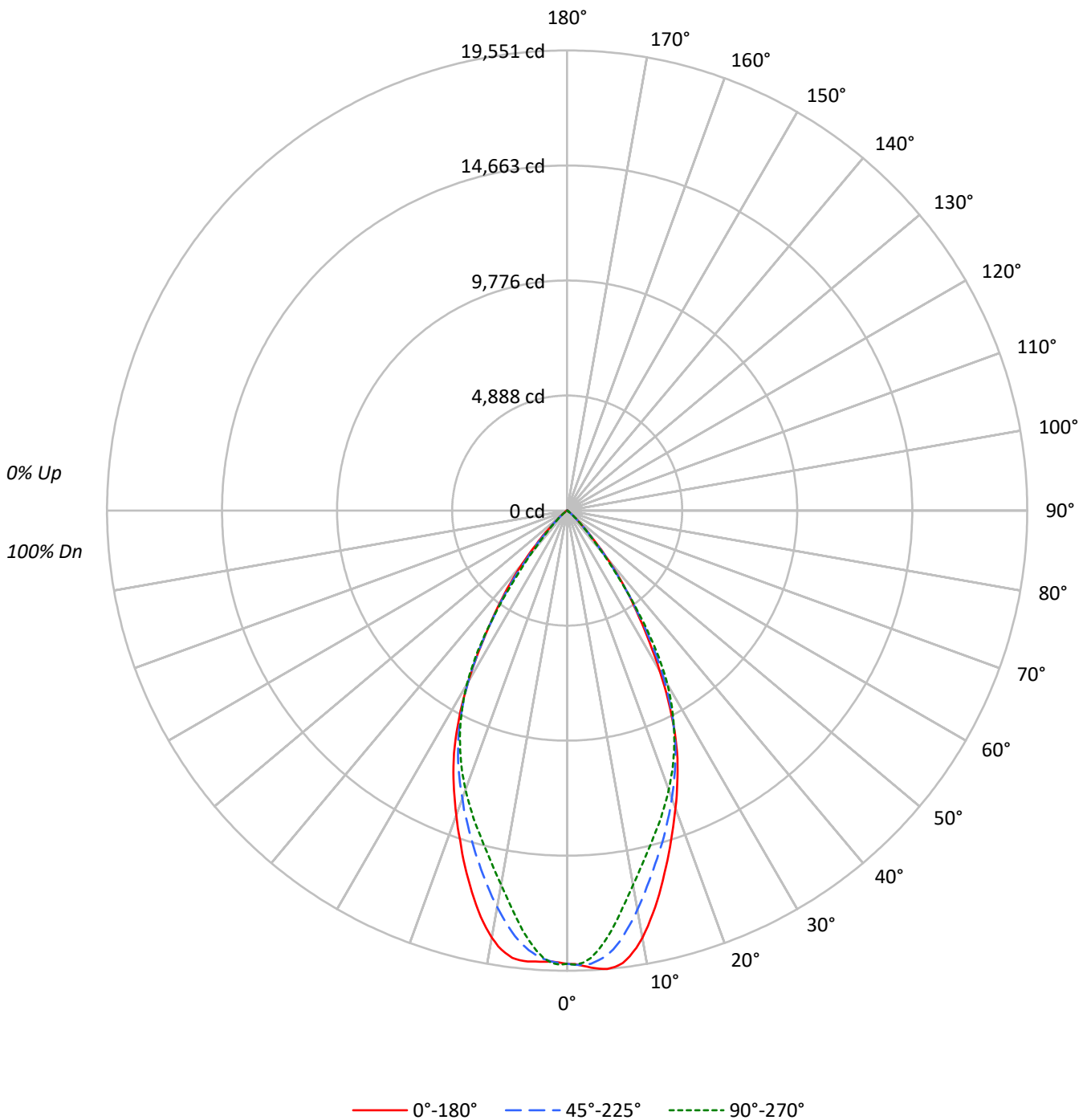
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	593781	593781	593781
5°	605181	568515	595322
10°	576993	505749	576846
15°	509509	456151	518173
20°	441537	414037	451985
25°	373061	366688	386759
30°	280389	303561	299559
35°	187698	198445	203557
40°	105159	90269	120613
45°	42262	37159	50225
50°	14598	14152	17294
55°	4027	4785	4532
60°	2313	2892	2603
65°	2050	1707	1364
70°	0	1271	847
75°	0	0	0
80°	0	0	835
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1748.1	11.5
10°-20°	4227.9	27.9
20°-30°	4955.3	32.7
30°-40°	3260.4	21.5
40°-50°	850.8	5.6
50°-60°	104.6	0.7
60°-70°	21.7	0.1
70°-80°	4.0	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°	10931.3	72.0
0°-40°	14191.7	93.5
0°-60°	15147.1	99.8
0°-90°	15173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15173.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	19256	19256	19256	19256	19256	
5°	19551	18994	18366	18746	19232	###
15°	15960	15056	14289	15056	16231	4449
25°	10965	10857	10777	10960	11367	4943
35°	4986	5098	5272	5323	5407	3122
45°	969	913	852	988	1152	869
55°	75	80	89	89	84	99
65°	28	23	23	19	19	20
75°	0	5	0	0	0	2
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°	19255.9	19255.9	19255.9	19255.9	19255.9	19255.9	19255.9	19255.9	19255.9
1°	19269.9	19298.0	19307.3	19335.5	19293.3	19265.3	19227.8	19199.6	19204.3
2°	19354.2	19368.3	19316.7	19298.0	19223.1	19199.6	19171.6	19166.9	19171.6
3°	19443.2	19415.0	19279.3	19152.9	19040.5	19026.4	19078.0	19152.9	19195.0
4°	19513.4	19438.5	19152.9	18918.8	18740.9	18726.9	18932.8	19124.7	19204.3
5°	19550.9	19415.0	18993.7	18600.4	18366.4	18455.3	18745.6	19087.3	19232.4
6°	19499.3	19298.0	18750.3	18225.9	17959.0	18076.1	18502.1	18998.4	19213.7
7°	19368.3	19110.8	18436.6	17818.6	17490.8	17673.4	18216.5	18848.5	19143.5
8°	19124.7	18815.8	18038.6	17345.7	17022.7	17228.6	17865.4	18633.2	18975.0
9°	18806.4	18464.7	17645.4	16915.0	16568.6	16812.0	17500.2	18347.6	18740.9
10°	18427.2	18062.0	17210.0	16465.6	16151.9	16381.3	17107.0	18015.2	18422.5
11°	17982.4	17631.3	16774.5	16044.3	15744.6	15969.3	16713.7	17617.3	18057.3
12°	17500.2	17177.2	16329.8	15636.9	15356.0	15571.4	16292.4	17205.3	17640.7
13°	17018.0	16694.9	15899.1	15243.7	14986.1	15192.1	15880.3	16755.9	17191.2
14°	16498.4	16203.4	15468.4	14869.1	14635.0	14831.6	15459.0	16301.7	16713.7
15°	15960.0	15725.8	15056.4	14508.6	14288.6	14475.8	15056.4	15833.5	16231.4
16°	15454.3	15239.0	14658.4	14152.8	13970.3	14120.0	14649.1	15365.4	15744.6
17°	14939.3	14742.7	14260.4	13801.7	13637.8	13783.0	14232.4	14892.5	15234.3
18°	14424.4	14260.4	13825.1	13431.9	13286.7	13417.8	13820.4	14415.0	14723.9
19°	13946.8	13797.0	13427.2	13094.7	12963.7	13080.7	13459.9	13956.2	14265.1
20°	13455.2	13333.5	13010.4	12738.9	12617.2	12724.8	13019.8	13502.1	13773.6
21°	12982.4	12874.7	12593.8	12364.3	12266.1	12355.1	12626.6	13062.0	13300.7
22°	12490.8	12430.0	12177.2	11985.2	11919.6	11975.8	12223.9	12598.5	12823.2
23°	12008.5	11952.4	11760.4	11601.3	11545.1	11601.3	11821.4	12158.4	12359.8
24°	11521.7	11460.9	11320.4	11217.3	11170.6	11217.3	11404.6	11690.2	11882.2
25°	10964.6	10955.2	10856.9	10800.7	10777.3	10828.8	10959.9	11208.0	11367.2
26°	10430.8	10402.7	10374.7	10365.3	10370.0	10398.0	10505.7	10693.0	10819.5
27°	9775.4	9817.6	9859.6	9915.9	9934.5	9958.0	10009.5	10145.2	10238.9
28°	9148.0	9227.6	9330.6	9443.0	9494.5	9494.5	9499.1	9574.1	9653.7
29°	8525.4	8609.6	8773.5	8942.1	9012.3	9002.9	8965.4	8998.2	9045.0
30°	7874.6	7982.3	8202.4	8422.4	8525.4	8488.0	8417.7	8385.0	8413.0
31°	7238.0	7345.6	7589.1	7827.8	7963.5	7921.5	7799.7	7776.4	7790.3
32°	6629.3	6737.0	6961.7	7214.5	7369.0	7312.9	7186.4	7148.9	7153.6
33°	6039.4	6123.7	6329.7	6563.8	6690.2	6676.1	6573.1	6526.3	6530.9
34°	5482.3	5552.5	5706.9	5885.0	6006.6	6001.9	5927.0	5931.7	5945.8
35°	4986.1	5023.5	5098.3	5196.7	5271.6	5313.7	5323.1	5360.5	5407.4
37.5°	3768.8	3782.8	3693.9	3595.5	3576.8	3698.6	3909.3	4091.9	4162.1
40°	2612.4	2579.6	2467.3	2294.1	2242.5	2378.4	2645.2	2902.7	2996.3
42.5°	1624.6	1610.5	1540.3	1409.2	1362.4	1442.0	1643.3	1840.0	1933.6
45°	969.1	950.3	912.9	861.4	852.1	884.8	987.8	1100.2	1151.7
47.5°	557.1	552.5	529.0	510.3	505.6	529.0	575.9	641.4	655.5
50°	304.3	299.7	295.0	295.0	295.0	309.0	332.4	351.1	360.5
52.5°	149.8	154.5	149.8	154.5	159.2	168.5	163.8	182.6	182.6
55°	74.9	70.2	79.6	89.0	89.0	89.0	89.0	89.0	84.3
57.5°	56.1	60.8	51.5	56.1	51.5	51.5	46.9	51.5	56.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	37.5	32.8	37.5	42.2	46.9	42.2	32.8	37.5	42.2
62.5°	18.7	18.7	18.7	28.1	42.2	32.8	28.1	23.4	23.4
65°	28.1	18.7	23.4	28.1	23.4	23.4	18.7	23.4	18.7
67.5°	14.1	23.4	14.1	9.4	14.1	18.7	14.1	9.4	9.4
70°	0.0	4.7	4.7	14.1	14.1	14.1	14.1	9.4	9.4
72.5°	4.7	4.7	4.7	9.4	4.7	9.4	4.7	4.7	9.4
75°	0.0	0.0	4.7	4.7	0.0	4.7	0.0	0.0	0.0
77.5°	4.7	0.0	4.7	4.7	0.0	0.0	0.0	4.7	0.0
80°	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	4.7
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)