

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: P250173

Luminaire Tested: **LSR8B150D010 EC8B150935 8LBM0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250173  
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 EC8B150935 8LBM0WH  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13793.0 lumens  
Efficiency: N/A  
Efficacy: 87.0 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

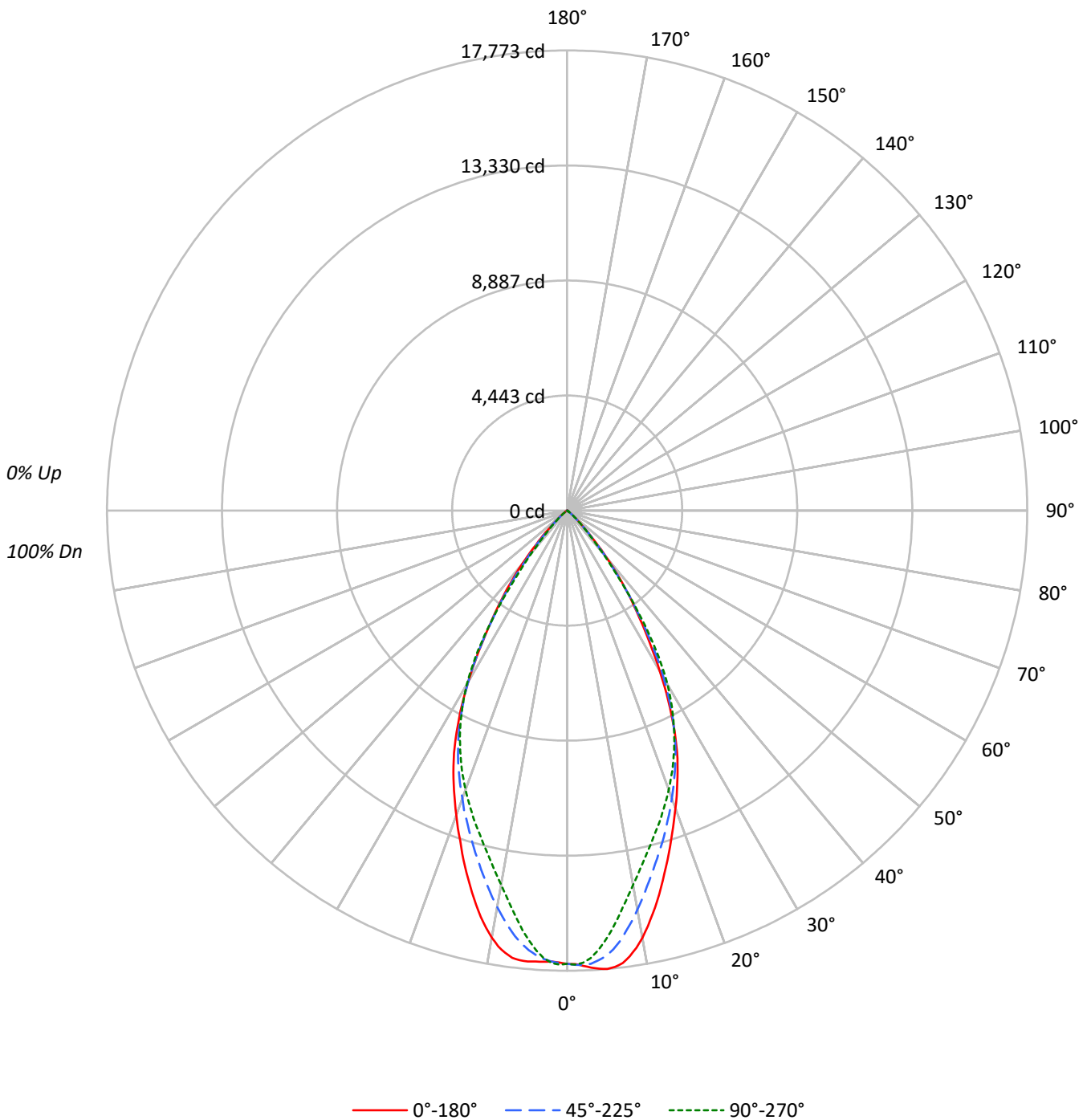
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	90°	180°
0°	539774	539774	539774
5°	550138	516807	541177
10°	524514	459751	524382
15°	463168	414665	471047
20°	401381	376379	410877
25°	339132	333338	351581
30°	254887	275952	272317
35°	170626	180398	185044
40°	95595	82058	109644
45°	38420	33780	45659
50°	13269	12862	15721
55°	3661	4349	4118
60°	2103	2627	2362
65°	1861	1547	1240
70°	0	1154	766
75°	0	0	0
80°	0	0	764
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1589.1	11.5
10°-20°	3843.4	27.9
20°-30°	4504.7	32.7
30°-40°	2963.8	21.5
40°-50°	773.4	5.6
50°-60°	95.1	0.7
60°-70°	19.7	0.1
70°-80°	3.7	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°	9937.1	72.0
0°-40°	12900.9	93.5
0°-60°	13769.5	99.8
0°-90°	13793.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13793.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	17504	17504	17504	17504	17504	
5°	17773	17266	16696	17041	17483	###
15°	14508	13687	12989	13687	14755	4044
25°	9967	9870	9797	9963	10333	4493
35°	4533	4635	4792	4839	4916	2838
45°	881	830	775	898	1047	790
55°	68	72	81	81	77	90
65°	26	21	21	17	17	18
75°	0	4	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°	17504.5	17504.5	17504.5	17504.5	17504.5	17504.5	17504.5	17504.5	17504.5
1°	17517.3	17542.9	17551.3	17576.9	17538.6	17513.1	17479.0	17453.4	17457.7
2°	17593.9	17606.7	17559.8	17542.9	17474.8	17453.4	17427.9	17423.6	17427.9
3°	17674.8	17649.2	17525.8	17410.9	17308.8	17296.0	17342.8	17410.9	17449.2
4°	17738.6	17670.5	17410.9	17198.1	17036.4	17023.7	17210.9	17385.3	17457.7
5°	17772.7	17649.2	17266.2	16908.7	16695.9	16776.8	17040.6	17351.3	17483.2
6°	17725.8	17542.9	17044.9	16568.3	16325.6	16432.1	16819.3	17270.5	17466.2
7°	17606.7	17372.6	16759.8	16198.0	15900.0	16066.0	16559.7	17134.2	17402.4
8°	17385.3	17104.5	16398.0	15768.1	15474.4	15661.7	16240.6	16938.5	17249.2
9°	17095.9	16785.3	16040.5	15376.6	15061.6	15282.9	15908.6	16678.9	17036.4
10°	16751.2	16419.3	15644.7	14968.0	14682.9	14891.4	15551.1	16376.7	16747.0
11°	16346.9	16027.7	15248.9	14585.0	14312.6	14516.9	15193.6	16015.0	16415.0
12°	15908.6	15614.9	14844.6	14214.7	13959.4	14155.2	14810.6	15640.4	16036.2
13°	15470.2	15176.5	14453.1	13857.2	13623.1	13810.4	14436.0	15231.9	15627.6
14°	14997.8	14729.7	14061.5	13516.7	13304.0	13482.7	14053.0	14819.0	15193.6
15°	14508.4	14295.5	13687.0	13189.0	12989.1	13159.2	13687.0	14393.4	14755.2
16°	14048.7	13853.0	13325.2	12865.6	12699.7	12835.8	13316.8	13967.9	14312.6
17°	13580.5	13401.8	12963.4	12546.4	12397.5	12529.4	12937.9	13538.1	13848.7
18°	13112.5	12963.4	12567.7	12210.2	12078.3	12197.4	12563.5	13103.9	13384.8
19°	12678.3	12542.1	12206.0	11903.8	11784.6	11891.0	12235.7	12686.9	12967.7
20°	12231.5	12120.8	11827.1	11580.3	11469.6	11567.5	11835.7	12274.1	12520.9
21°	11801.6	11703.7	11448.4	11239.8	11150.4	11231.4	11478.2	11874.0	12091.0
22°	11354.8	11299.5	11069.6	10895.1	10835.5	10886.6	11112.1	11452.6	11657.0
23°	10916.4	10865.3	10690.8	10546.2	10495.0	10546.2	10746.2	11052.6	11235.6
24°	10473.8	10418.5	10290.8	10197.1	10154.6	10197.1	10367.4	10627.0	10801.5
25°	9967.4	9958.8	9869.5	9818.4	9797.1	9843.9	9963.1	10188.7	10333.3
26°	9482.1	9456.6	9431.1	9422.5	9426.8	9452.3	9550.2	9720.5	9835.4
27°	8886.3	8924.7	8962.9	9014.0	9031.0	9052.3	9099.1	9222.5	9307.7
28°	8316.0	8388.4	8482.0	8584.1	8631.0	8631.0	8635.2	8703.3	8775.7
29°	7750.0	7826.6	7975.6	8128.8	8192.6	8184.1	8150.0	8179.8	8222.4
30°	7158.4	7256.3	7456.4	7656.4	7750.0	7716.0	7652.1	7622.4	7647.9
31°	6579.7	6677.5	6898.8	7115.8	7239.2	7201.0	7090.3	7069.1	7081.8
32°	6026.4	6124.3	6328.5	6558.3	6698.8	6647.8	6532.8	6498.7	6503.0
33°	5490.1	5566.7	5754.0	5966.8	6081.7	6068.9	5975.3	5932.8	5936.9
34°	4983.7	5047.5	5187.9	5349.7	5460.3	5456.0	5387.9	5392.2	5405.0
35°	4532.6	4566.6	4634.6	4724.1	4792.2	4830.4	4838.9	4873.0	4915.6
37.5°	3426.0	3438.7	3357.9	3268.5	3251.5	3362.2	3553.7	3719.7	3783.5
40°	2374.8	2345.0	2242.9	2085.4	2038.5	2162.0	2404.6	2638.7	2723.8
42.5°	1476.8	1464.0	1400.2	1281.1	1238.5	1310.8	1493.8	1672.6	1757.7
45°	881.0	863.9	829.9	783.1	774.6	804.3	898.0	1000.1	1047.0
47.5°	506.4	502.2	480.9	463.9	459.7	480.9	523.5	583.1	595.9
50°	276.6	272.4	268.1	268.1	268.1	280.9	302.2	319.2	327.7
52.5°	136.2	140.5	136.2	140.5	144.7	153.2	148.9	166.0	166.0
55°	68.1	63.8	72.4	80.9	80.9	80.9	80.9	80.9	76.6
57.5°	51.0	55.3	46.9	51.0	46.9	46.9	42.6	46.9	51.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	34.1	29.8	34.1	38.3	42.6	38.3	29.8	34.1	38.3
62.5°	17.0	17.0	17.0	25.5	38.3	29.8	25.5	21.2	21.2
65°	25.5	17.0	21.2	25.5	21.2	21.2	17.0	21.2	17.0
67.5°	12.8	21.2	12.8	8.5	12.8	17.0	12.8	8.5	8.5
70°	0.0	4.3	4.3	12.8	12.8	12.8	12.8	8.5	8.5
72.5°	4.3	4.3	4.3	8.5	4.3	8.5	4.3	4.3	8.5
75°	0.0	0.0	4.3	4.3	0.0	4.3	0.0	0.0	0.0
77.5°	4.3	0.0	4.3	4.3	0.0	0.0	0.0	4.3	0.0
80°	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	4.3
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)