

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: P247382

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247382  
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: LSR8B80D010 EC8B80827 8LBW0WH  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8163.0 lumens  
Efficiency: N/A  
Efficacy: 109.7 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

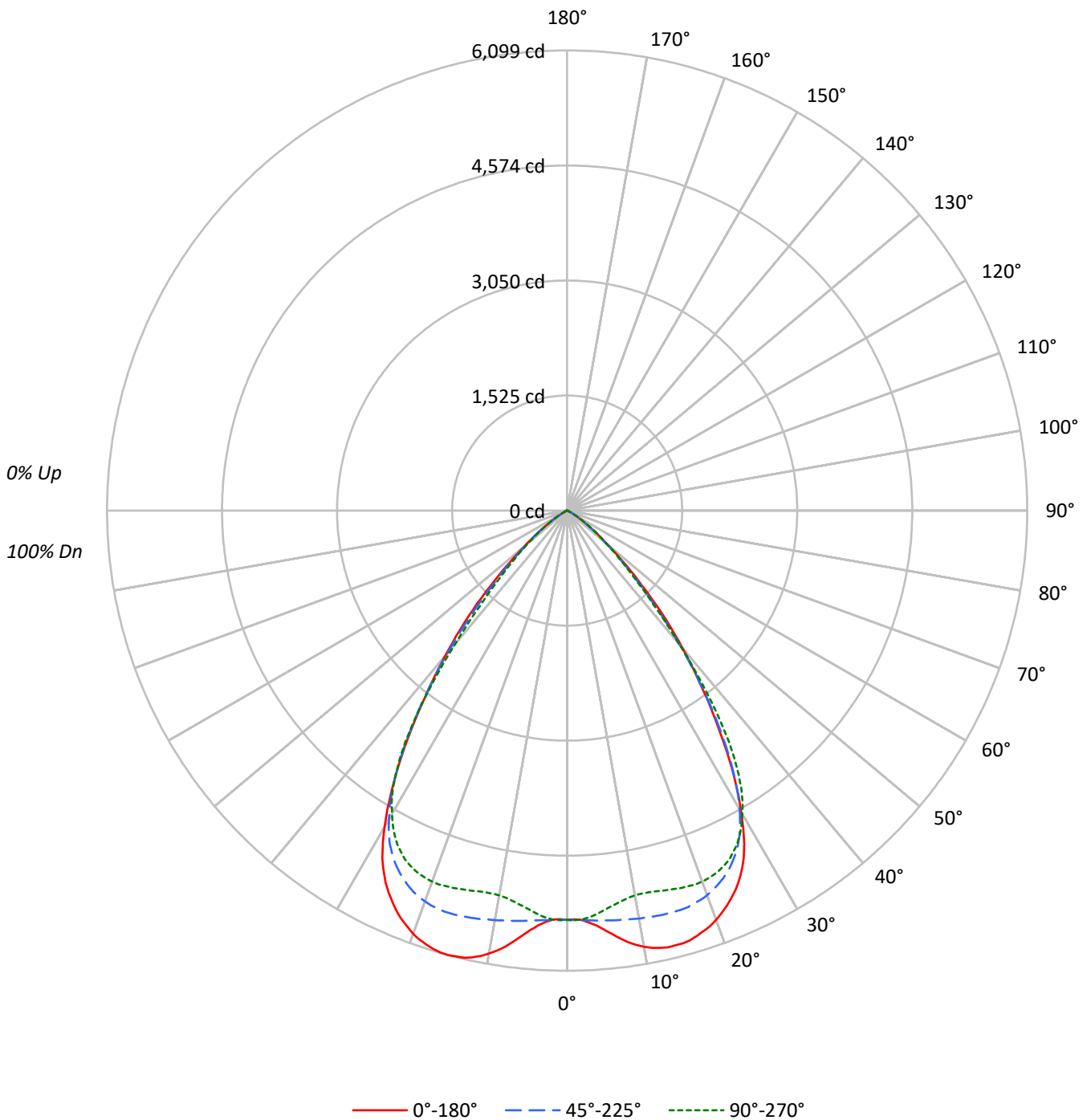
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	96	95	94	92		
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	90	88	86	84		
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84	84	84	83	79	84	81	78	
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	76	76	76	74	72	78	74	71	
4	94	85	79	74	92	84	79	74	82	77	73	80	76	72	78	74	71	70	70	70	66	73	69	65	64	
5	88	79	72	67	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	60	68	63	60	58	
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58	58	58	55	63	59	55	53	
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	53	53	53	51	59	54	51	49	
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	47	55	50	47	45	
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	50	47	45	45	45	43	51	47	44	42	
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42	42	42	40	47	44	42	42	

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

	0°	90°	180°
0°	167315	167315	167315
5°	172452	164961	172736
10°	183827	162177	186714
15°	189482	166155	194705
20°	189476	171703	195907
25°	183672	173322	190263
30°	164393	165375	172272
35°	130934	140740	138226
40°	95659	93063	101134
45°	61114	54481	66443
50°	33063	32396	35495
55°	16972	17596	16972
60°	7388	7388	5403
65°	1518	2021	1685
70°	1037	1452	1659
75°	0	822	0
80°	408	408	1634
85°	0	814	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	523.0	6.4
10°-20°	1573.5	19.3
20°-30°	2395.0	29.3
30°-40°	2228.9	27.3
40°-50°	1084.8	13.3
50°-60°	309.1	3.8
60°-70°	40.4	0.5
70°-80°	6.4	0.1
80°-90°	1.9	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°	4491.6	55.0
0°-40°	6720.4	82.3
0°-60°	8114.3	99.4
0°-90°	8163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8163.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5426	5426	5426	5426	5426	
5°	5571	5449	5329	5454	5580	543
15°	5935	5504	5205	5557	6099	1670
25°	5398	5163	5094	5276	5592	2450
35°	3478	3527	3739	3700	3672	2163
45°	1401	1298	1249	1399	1524	1108
55°	316	316	327	320	316	310
65°	21	25	28	25	23	40
75°	0	2	7	2	0	4
85°	0	2	2	5	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°	5425.9	5425.9	5425.9	5425.9	5425.9	5425.9	5425.9	5425.9	5425.9
1°	5419.0	5425.9	5430.6	5428.3	5430.6	5428.3	5423.7	5414.5	5414.5
2°	5428.3	5437.5	5435.1	5430.6	5423.7	5423.7	5437.5	5419.0	5423.7
3°	5465.1	5465.1	5437.5	5412.2	5402.9	5412.2	5435.1	5449.0	5460.6
4°	5511.2	5502.0	5446.7	5389.1	5370.6	5393.7	5444.4	5488.2	5511.2
5°	5571.2	5543.5	5449.0	5361.4	5329.2	5363.7	5453.7	5536.6	5580.4
6°	5640.4	5598.8	5462.9	5331.5	5290.0	5338.4	5467.5	5594.3	5661.0
7°	5709.5	5642.6	5469.8	5308.4	5255.4	5322.2	5479.0	5658.8	5746.3
8°	5774.0	5684.1	5476.7	5287.7	5223.1	5292.3	5488.2	5716.4	5831.6
9°	5827.1	5723.3	5481.3	5271.6	5195.5	5273.9	5499.8	5767.1	5903.1
10°	5870.8	5753.3	5490.6	5262.3	5179.4	5264.7	5511.2	5811.0	5963.0
11°	5905.4	5774.0	5492.8	5257.7	5172.4	5257.7	5520.4	5854.7	6013.8
12°	5926.1	5792.5	5499.8	5260.0	5174.7	5264.7	5534.3	5873.2	6055.3
13°	5940.0	5799.4	5504.3	5266.9	5179.4	5269.2	5543.5	5889.3	6082.9
14°	5940.0	5794.8	5504.3	5273.9	5193.2	5278.4	5550.4	5900.8	6089.8
15°	5935.4	5792.5	5504.3	5285.3	5204.7	5287.7	5557.3	5907.7	6099.0
16°	5921.6	5778.6	5502.0	5292.3	5216.2	5296.9	5559.6	5903.1	6092.2
17°	5893.9	5771.8	5492.8	5299.2	5227.8	5306.1	5559.6	5891.6	6075.9
18°	5857.0	5723.3	5469.8	5292.3	5230.0	5303.8	5545.9	5861.6	6046.1
19°	5824.7	5695.7	5453.7	5287.7	5239.2	5310.8	5536.6	5840.8	6013.8
20°	5774.0	5649.6	5425.9	5273.9	5232.4	5296.9	5513.6	5804.0	5970.0
21°	5711.8	5596.5	5386.8	5250.8	5220.8	5278.4	5481.3	5753.3	5910.0
22°	5649.6	5536.6	5345.3	5227.8	5202.4	5262.3	5446.7	5700.2	5847.8
23°	5575.8	5469.8	5292.3	5188.6	5174.7	5225.5	5398.3	5642.6	5774.0
24°	5492.8	5391.4	5234.7	5144.7	5140.2	5186.3	5343.0	5566.6	5686.5
25°	5398.3	5308.4	5163.2	5089.4	5094.1	5133.3	5276.1	5481.3	5592.0
26°	5285.3	5202.4	5080.2	5022.6	5029.6	5068.7	5200.0	5382.2	5488.2
27°	5158.6	5082.5	4983.4	4941.9	4960.4	4994.9	5107.9	5273.9	5359.2
28°	4999.6	4939.6	4868.2	4849.8	4872.8	4912.0	5006.5	5142.5	5218.5
29°	4815.1	4782.9	4727.6	4736.8	4769.0	4801.3	4879.7	4978.8	5038.8
30°	4616.9	4603.1	4570.8	4607.7	4644.5	4672.3	4725.3	4792.1	4838.2
31°	4414.1	4398.0	4402.5	4462.5	4517.8	4536.2	4566.2	4598.4	4633.1
32°	4185.9	4181.3	4199.7	4287.3	4358.8	4368.0	4370.3	4379.5	4398.0
33°	3953.1	3946.2	3983.1	4091.4	4172.1	4179.0	4160.5	4151.3	4165.1
34°	3711.1	3711.1	3759.5	3872.5	3966.9	3973.8	3937.0	3932.3	3918.5
35°	3478.2	3471.3	3526.6	3632.7	3738.7	3741.0	3699.5	3674.2	3671.9
37.5°	2902.0	2890.5	2908.9	2964.2	3042.6	3084.1	3079.5	3070.3	3063.3
40°	2376.4	2348.8	2311.9	2288.9	2311.9	2397.2	2470.9	2505.6	2512.4
42.5°	1880.9	1841.7	1763.4	1698.8	1708.0	1786.4	1899.3	1977.7	2016.9
45°	1401.4	1362.2	1297.7	1249.3	1249.3	1304.6	1399.1	1479.8	1523.6
47.5°	1000.4	975.0	938.1	917.4	931.2	954.3	1007.3	1067.3	1085.7
50°	689.2	682.3	661.6	661.6	675.3	693.8	703.0	733.0	739.9
52.5°	481.8	470.2	472.5	474.9	486.3	488.7	502.5	495.5	507.1
55°	315.7	315.7	315.7	322.7	327.3	327.3	320.4	315.7	315.7
57.5°	200.6	195.9	198.2	202.8	202.8	195.9	184.4	182.1	170.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	119.8	119.8	122.2	122.2	119.8	112.9	101.4	92.2	87.6
62.5°	62.2	64.5	64.5	76.1	64.5	57.6	53.0	41.5	39.2
65°	20.8	25.3	25.3	25.3	27.7	25.3	25.3	23.1	23.1
67.5°	13.9	16.1	16.1	18.4	18.4	18.4	18.4	23.1	16.1
70°	11.5	11.5	13.9	16.1	16.1	18.4	13.9	11.5	18.4
72.5°	6.9	9.2	6.9	11.5	9.2	9.2	9.2	9.2	9.2
75°	0.0	4.6	2.3	0.0	6.9	4.6	2.3	4.6	0.0
77.5°	2.3	2.3	2.3	2.3	4.6	4.6	4.6	4.6	2.3
80°	2.3	2.3	4.6	2.3	2.3	4.6	0.0	0.0	9.2
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	0.0	2.3	2.3
85°	0.0	2.3	2.3	2.3	2.3	2.3	4.6	4.6	0.0
87.5°	0.0	2.3	0.0	2.3	0.0	0.0	0.0	4.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)