

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: P250142

Luminaire Tested: **LSR8B90D010 EC8B90840 8LBM0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250142
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 EC8B90840 8LBM0WH
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9394.0 lumens
Efficiency: N/A
Efficacy: 109.1 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

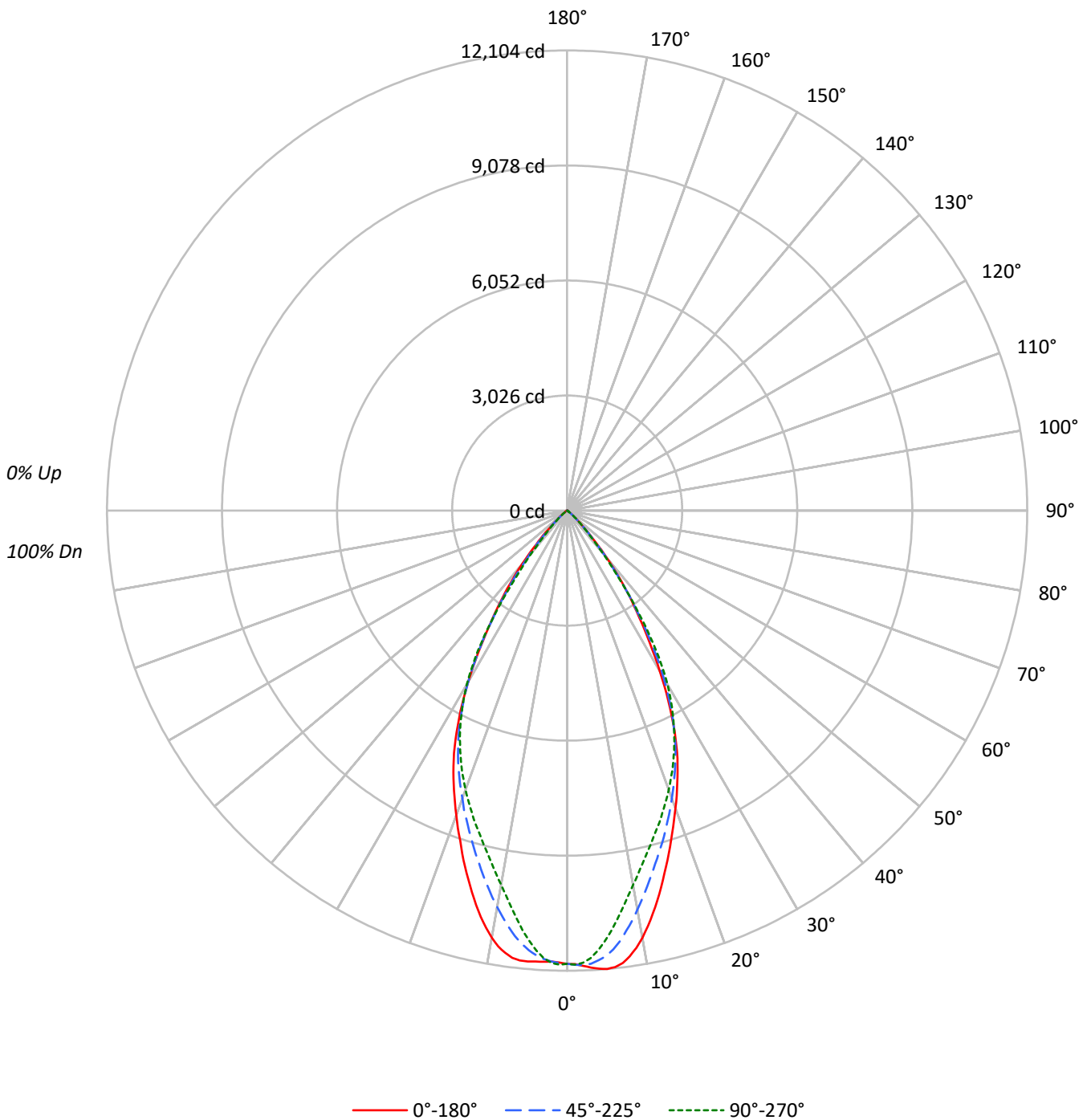
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	367624	367624	367624
5°	374681	351982	368580
10°	357233	313123	357142
15°	315448	282417	320815
20°	273368	256340	279836
25°	230973	227026	239451
30°	173597	187943	185465
35°	116208	122863	126029
40°	65107	55889	74675
45°	26165	23004	31098
50°	9038	8760	10708
55°	2495	2962	2806
60°	1431	1789	1610
65°	1270	1058	846
70°	0	784	523
75°	0	0	0
80°	0	0	515
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1082.3	11.5
10°-20°	2617.6	27.9
20°-30°	3068.0	32.7
30°-40°	2018.6	21.5
40°-50°	526.7	5.6
50°-60°	64.8	0.7
60°-70°	13.5	0.1
70°-80°	2.5	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°	6767.9	72.0
0°-40°	8786.4	93.5
0°-60°	9378.0	99.8
0°-90°	9394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9394.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11922	11922	11922	11922	11922	
5°	12104	11760	11371	11606	11907	###
15°	9881	9322	8846	9322	10049	2754
25°	6788	6722	6672	6786	7038	3060
35°	3087	3156	3264	3296	3348	1933
45°	600	565	528	612	713	538
55°	46	49	55	55	52	61
65°	17	14	14	12	12	12
75°	0	3	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°	11921.8	11921.8	11921.8	11921.8	11921.8	11921.8	11921.8	11921.8	11921.8
1°	11930.5	11947.9	11953.7	11971.1	11945.0	11927.6	11904.4	11887.0	11889.9
2°	11982.7	11991.4	11959.5	11947.9	11901.5	11887.0	11869.6	11866.7	11869.6
3°	12037.8	12020.3	11936.3	11858.1	11788.5	11779.8	11811.7	11858.1	11884.1
4°	12081.3	12034.9	11858.1	11713.1	11603.0	11594.3	11721.8	11840.6	11889.9
5°	12104.4	12020.3	11759.5	11516.0	11371.1	11426.1	11605.9	11817.4	11907.3
6°	12072.5	11947.9	11608.8	11284.2	11118.9	11191.4	11455.1	11762.4	11895.7
7°	11991.4	11832.0	11414.6	11032.0	10829.0	10942.1	11278.3	11669.6	11852.2
8°	11840.6	11649.3	11168.2	10739.2	10539.2	10666.7	11061.0	11536.3	11747.9
9°	11643.5	11432.0	10924.7	10472.5	10258.0	10408.8	10834.9	11359.5	11603.0
10°	11408.8	11182.7	10655.1	10194.3	10000.1	10142.1	10591.4	11153.7	11405.9
11°	11133.4	10916.0	10385.6	9933.4	9747.9	9887.0	10347.9	10907.3	11179.8
12°	10834.9	10634.9	10110.2	9681.2	9507.3	9640.7	10087.0	10652.2	10921.8
13°	10536.3	10336.3	9843.6	9437.7	9278.3	9405.8	9831.9	10374.0	10643.5
14°	10214.6	10031.9	9576.9	9205.8	9060.9	9182.6	9571.1	10092.8	10347.9
15°	9881.2	9736.3	9321.8	8982.6	8846.5	8962.3	9321.8	9802.9	10049.3
16°	9568.2	9434.8	9075.4	8762.3	8649.4	8742.1	9069.6	9513.1	9747.9
17°	9249.3	9127.6	8829.0	8545.0	8443.5	8533.4	8811.6	9220.4	9431.9
18°	8930.5	8829.0	8559.5	8316.0	8226.2	8307.3	8556.6	8924.7	9116.0
19°	8634.8	8542.1	8313.1	8107.3	8026.2	8098.6	8333.4	8640.6	8831.9
20°	8330.5	8255.1	8055.1	7887.0	7811.6	7878.3	8060.9	8359.5	8527.6
21°	8037.7	7971.1	7797.1	7655.1	7594.2	7649.3	7817.4	8087.0	8234.8
22°	7733.4	7695.7	7539.2	7420.3	7379.8	7414.5	7568.1	7800.1	7939.2
23°	7434.8	7400.0	7281.2	7182.7	7147.8	7182.7	7318.9	7527.6	7652.3
24°	7133.4	7095.7	7008.8	6944.9	6916.0	6944.9	7060.9	7237.7	7356.6
25°	6788.5	6782.7	6721.8	6687.0	6672.5	6704.4	6785.6	6939.2	7037.7
26°	6458.0	6440.6	6423.2	6417.4	6420.3	6437.7	6504.4	6620.3	6698.6
27°	6052.2	6078.3	6104.4	6139.2	6150.7	6165.3	6197.1	6281.2	6339.2
28°	5663.8	5713.1	5776.8	5846.4	5878.3	5878.3	5881.2	5927.5	5976.8
29°	5278.3	5330.4	5431.9	5536.3	5579.7	5573.9	5550.7	5571.0	5600.0
30°	4875.4	4942.1	5078.3	5214.6	5278.3	5255.1	5211.6	5191.4	5208.7
31°	4481.2	4547.9	4698.6	4846.4	4930.4	4904.4	4829.0	4814.5	4823.2
32°	4104.4	4171.1	4310.1	4466.7	4562.3	4527.6	4449.3	4426.1	4429.0
33°	3739.1	3791.3	3918.9	4063.8	4142.1	4133.3	4069.6	4040.6	4043.5
34°	3394.2	3437.7	3533.3	3643.5	3718.9	3715.9	3669.6	3672.5	3681.2
35°	3087.0	3110.2	3156.5	3217.4	3263.8	3289.8	3295.7	3318.8	3347.9
37.5°	2333.4	2342.0	2287.0	2226.1	2214.5	2289.9	2420.3	2533.4	2576.8
40°	1617.4	1597.1	1527.5	1420.3	1388.4	1472.5	1637.7	1797.1	1855.1
42.5°	1005.8	997.1	953.6	872.5	843.5	892.8	1017.4	1139.2	1197.1
45°	600.0	588.4	565.2	533.3	527.5	547.8	611.6	681.1	713.1
47.5°	344.9	342.1	327.5	316.0	313.1	327.5	356.5	397.1	405.8
50°	188.4	185.5	182.6	182.6	182.6	191.3	205.8	217.4	223.2
52.5°	92.8	95.7	92.8	95.7	98.6	104.3	101.4	113.1	113.1
55°	46.4	43.5	49.3	55.1	55.1	55.1	55.1	55.1	52.2
57.5°	34.8	37.7	31.9	34.8	31.9	31.9	29.0	31.9	34.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	23.2	20.3	23.2	26.1	29.0	26.1	20.3	23.2	26.1
62.5°	11.6	11.6	11.6	17.4	26.1	20.3	17.4	14.5	14.5
65°	17.4	11.6	14.5	17.4	14.5	14.5	11.6	14.5	11.6
67.5°	8.7	14.5	8.7	5.8	8.7	11.6	8.7	5.8	5.8
70°	0.0	2.9	2.9	8.7	8.7	8.7	8.7	5.8	5.8
72.5°	2.9	2.9	2.9	5.8	2.9	5.8	2.9	2.9	5.8
75°	0.0	0.0	2.9	2.9	0.0	2.9	0.0	0.0	0.0
77.5°	2.9	0.0	2.9	2.9	0.0	0.0	0.0	2.9	0.0
80°	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	2.9
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)