

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: P250170

Luminaire Tested: **LSR8B90D010 EC8B90935 8LBM0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250170
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 EC8B90935 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: 8064.0 lumens
Efficiency: N/A
Efficacy: 93.7 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

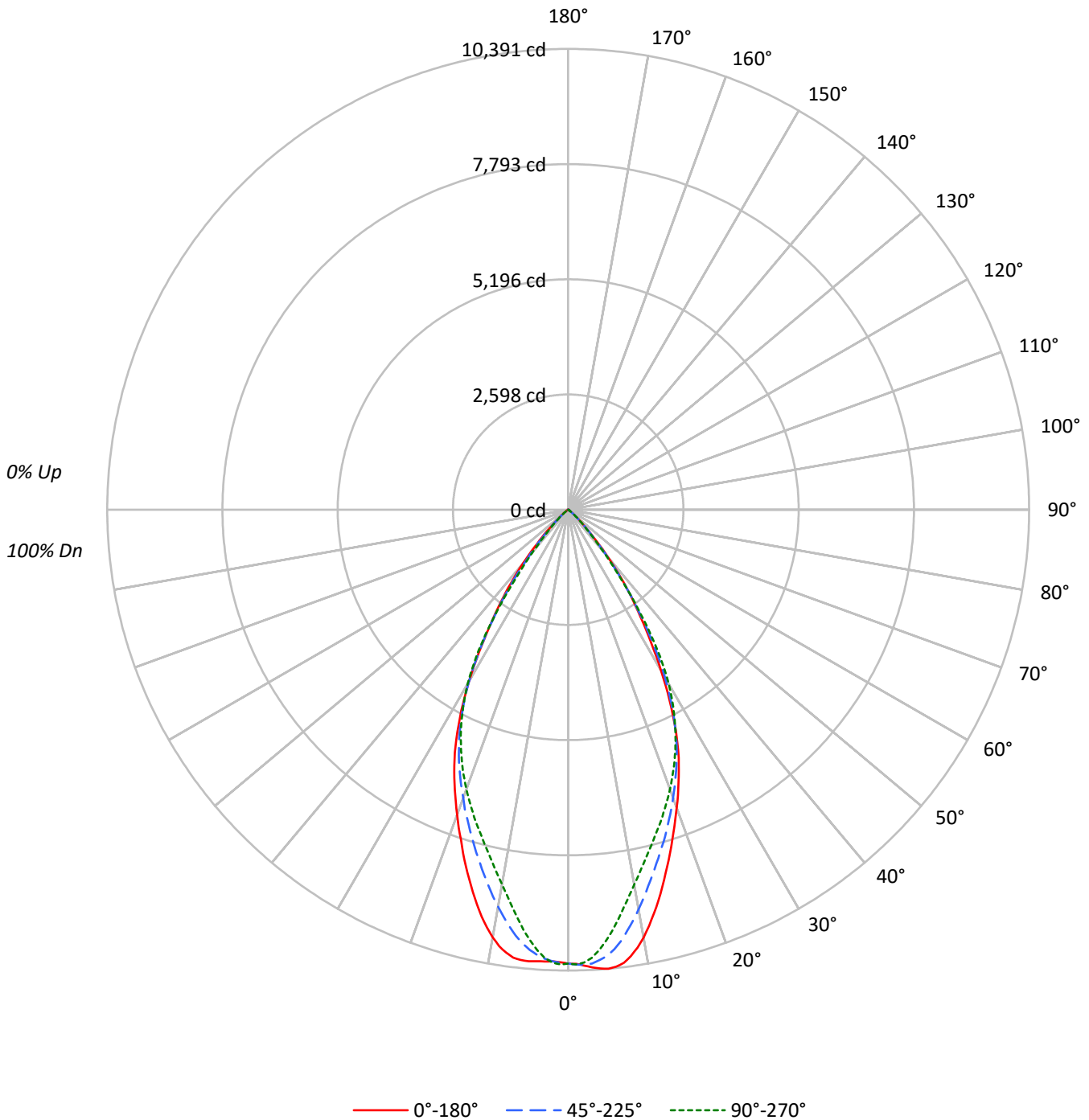
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	315576	315576	315576
5°	321635	302149	316397
10°	306654	268792	306576
15°	270787	242432	275393
20°	234666	220050	240218
25°	198272	194883	205550
30°	149018	161334	159208
35°	99753	105468	108186
40°	55889	47975	64100
45°	22463	19746	26693
50°	7757	7522	9192
55°	2140	2543	2409
60°	1227	1536	1381
65°	1087	905	722
70°	0	676	451
75°	0	0	0
80°	0	0	444
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	929.0	11.5
10°-20°	2247.0	27.9
20°-30°	2633.6	32.7
30°-40°	1732.8	21.5
40°-50°	452.2	5.6
50°-60°	55.6	0.7
60°-70°	11.5	0.1
70°-80°	2.2	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°	5809.7	72.0
0°-40°	7542.5	93.5
0°-60°	8050.3	99.8
0°-90°	8064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8064.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10234	10234	10234	10234	10234	
5°	10391	10095	9761	9963	10222	973
15°	8482	8002	7594	8002	8626	2364
25°	5827	5770	5728	5825	6041	2627
35°	2650	2710	2802	2829	2874	1659
45°	515	485	453	525	612	462
55°	40	42	47	47	45	53
65°	15	12	12	10	10	10
75°	0	2	0	0	0	1
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°	10233.9	10233.9	10233.9	10233.9	10233.9	10233.9	10233.9	10233.9	10233.9
1°	10241.4	10256.3	10261.3	10276.2	10253.8	10238.9	10219.0	10204.0	10206.5
2°	10286.2	10293.7	10266.3	10256.3	10216.5	10204.0	10189.1	10186.6	10189.1
3°	10333.5	10318.5	10246.4	10179.2	10119.5	10112.0	10139.4	10179.2	10201.5
4°	10370.8	10331.0	10179.2	10054.8	9960.2	9952.8	10062.2	10164.2	10206.5
5°	10390.7	10318.5	10094.6	9885.6	9761.2	9808.4	9962.7	10144.3	10221.5
6°	10363.3	10256.3	9965.2	9686.5	9544.7	9606.9	9833.3	10097.1	10211.5
7°	10293.7	10156.8	9798.5	9470.1	9295.9	9392.9	9681.6	10017.4	10174.2
8°	10164.2	10000.0	9587.0	9218.7	9047.0	9156.5	9495.0	9903.0	10084.7
9°	9995.0	9813.4	9378.0	8989.8	8805.7	8935.1	9300.9	9751.2	9960.2
10°	9793.5	9599.4	9146.6	8751.0	8584.3	8706.2	9091.9	9574.5	9791.0
11°	9557.1	9370.5	8915.2	8527.1	8367.8	8487.2	8882.8	9363.1	9596.9
12°	9300.9	9129.2	8678.8	8310.6	8161.3	8275.7	8658.9	9144.1	9375.5
13°	9044.5	8872.9	8449.9	8101.5	7964.7	8074.2	8439.9	8905.2	9136.6
14°	8768.4	8611.6	8221.0	7902.5	7778.1	7882.6	8216.0	8663.9	8882.8
15°	8482.2	8357.8	8002.0	7710.9	7594.0	7693.5	8002.0	8415.0	8626.5
16°	8213.5	8099.1	7790.5	7521.8	7424.8	7504.4	7785.6	8166.3	8367.8
17°	7939.8	7835.3	7579.0	7335.2	7248.1	7325.2	7564.1	7914.9	8096.6
18°	7666.1	7579.0	7347.6	7138.6	7061.5	7131.2	7345.2	7661.1	7825.3
19°	7412.3	7332.7	7136.1	6959.5	6889.8	6952.0	7153.6	7417.3	7581.5
20°	7151.1	7086.3	6914.7	6770.4	6705.7	6762.9	6919.6	7176.0	7320.3
21°	6899.7	6842.5	6693.2	6571.3	6519.0	6566.4	6710.6	6942.1	7068.9
22°	6638.5	6606.2	6471.8	6369.8	6334.9	6364.8	6496.6	6695.7	6815.2
23°	6382.2	6352.4	6250.3	6165.7	6135.9	6165.7	6282.7	6461.8	6568.8
24°	6123.4	6091.1	6016.5	5961.7	5936.8	5961.7	6061.2	6213.0	6315.0
25°	5827.4	5822.4	5770.1	5740.2	5727.8	5755.2	5824.9	5956.7	6041.3
26°	5543.7	5528.7	5513.8	5508.8	5511.3	5526.2	5583.5	5683.0	5750.2
27°	5195.4	5217.8	5240.1	5270.0	5279.9	5292.4	5319.7	5391.9	5441.7
28°	4861.9	4904.2	4958.9	5018.7	5046.1	5046.1	5048.5	5088.3	5130.6
29°	4531.0	4575.8	4662.9	4752.4	4789.8	4784.8	4764.9	4782.3	4807.2
30°	4185.1	4242.4	4359.3	4476.3	4531.0	4511.1	4473.8	4456.4	4471.3
31°	3846.8	3904.0	4033.4	4160.2	4232.4	4210.0	4145.3	4132.9	4140.3
32°	3523.3	3580.5	3699.9	3834.3	3916.4	3886.6	3819.4	3799.5	3802.0
33°	3209.8	3254.6	3364.0	3488.5	3555.6	3548.1	3493.4	3468.6	3471.0
34°	2913.7	2951.0	3033.1	3127.7	3192.3	3189.8	3150.0	3152.5	3160.0
35°	2649.9	2669.9	2709.6	2761.9	2801.7	2824.1	2829.1	2849.0	2873.9
37.5°	2003.0	2010.4	1963.2	1910.9	1901.0	1965.7	2077.7	2174.7	2212.0
40°	1388.4	1371.0	1311.3	1219.2	1191.8	1264.0	1405.8	1542.7	1592.4
42.5°	863.4	855.9	818.6	749.0	724.1	766.4	873.4	977.9	1027.6
45°	515.1	505.1	485.2	457.8	452.8	470.3	525.0	584.7	612.1
47.5°	296.1	293.6	281.2	271.2	268.7	281.2	306.1	340.9	348.4
50°	161.7	159.3	156.8	156.8	156.8	164.2	176.7	186.6	191.6
52.5°	79.6	82.1	79.6	82.1	84.6	89.6	87.1	97.0	97.0
55°	39.8	37.3	42.3	47.3	47.3	47.3	47.3	47.3	44.8
57.5°	29.8	32.3	27.4	29.8	27.4	27.4	24.9	27.4	29.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	19.9	17.4	19.9	22.4	24.9	22.4	17.4	19.9	22.4
62.5°	9.9	9.9	9.9	14.9	22.4	17.4	14.9	12.4	12.4
65°	14.9	9.9	12.4	14.9	12.4	12.4	9.9	12.4	9.9
67.5°	7.5	12.4	7.5	5.0	7.5	9.9	7.5	5.0	5.0
70°	0.0	2.5	2.5	7.5	7.5	7.5	7.5	5.0	5.0
72.5°	2.5	2.5	2.5	5.0	2.5	5.0	2.5	2.5	5.0
75°	0.0	0.0	2.5	2.5	0.0	2.5	0.0	0.0	0.0
77.5°	2.5	0.0	2.5	2.5	0.0	0.0	0.0	2.5	0.0
80°	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5
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)