

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: P250135

Luminaire Tested: **LSR8B90D010 EC8B90835 8LBM0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250135
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 EC8B90835 8LBM0WH
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9456.0 lumens
Efficiency: N/A
Efficacy: 109.8 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

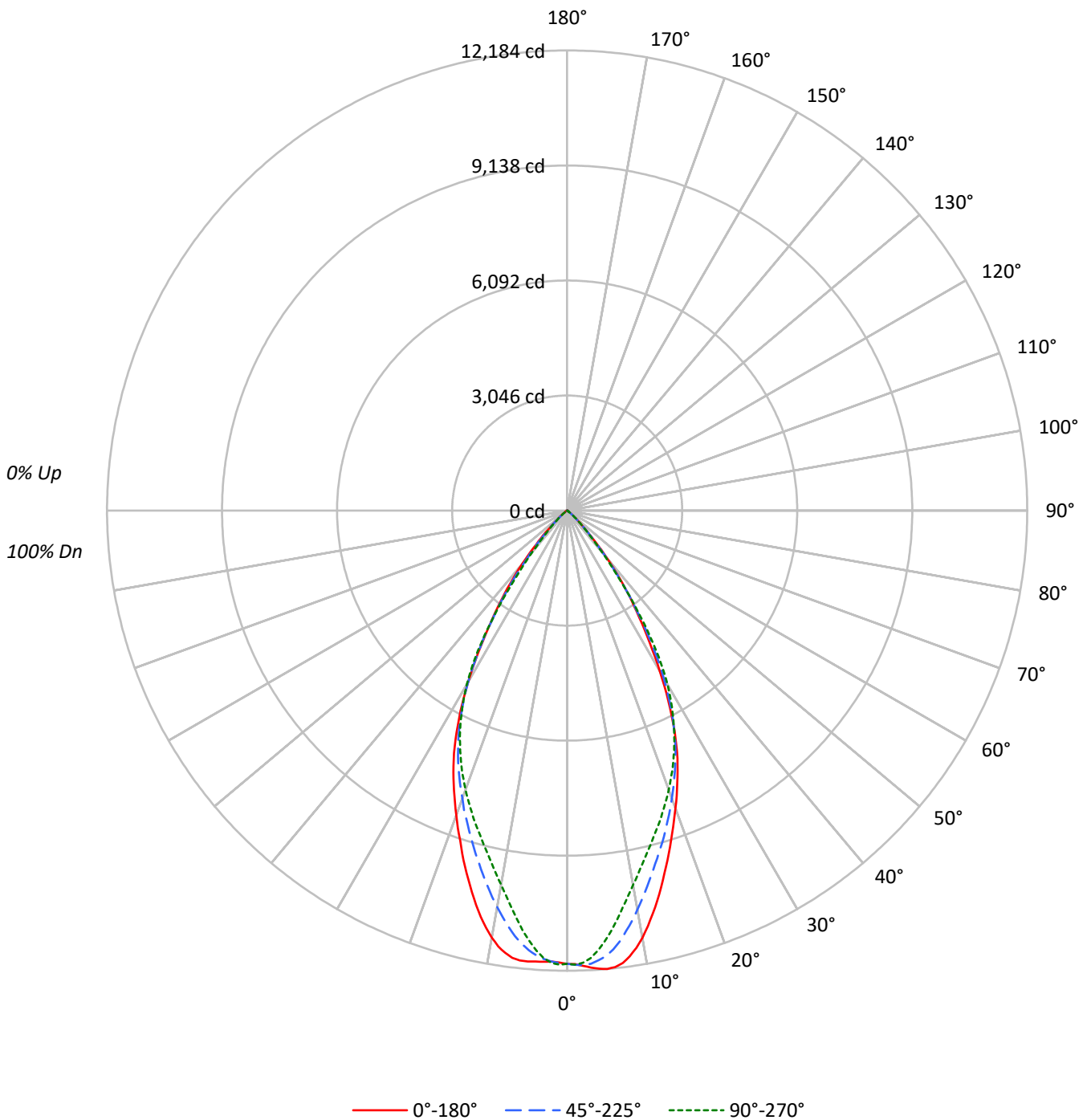
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P250135

CATALOG NUMBER: LSR8B90D010 EC8B90835 8LBM0WH

Luminous Intensity Polar Plot





TEST NUMBER: P250135

CATALOG NUMBER: LSR8B90D010 EC8B90835 8LBM0WH

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°	370051	370051	370051
5°	377154	354307	371013
10°	359590	315190	359496
15°	317530	284278	322931
20°	275173	258033	281683
25°	232497	228526	241034
30°	174743	189182	186690
35°	116976	123676	126861
40°	65537	56259	75166
45°	26340	23156	31303
50°	9096	8817	10779
55°	2511	2984	2822
60°	1437	1801	1622
65°	1277	1065	846
70°	0	793	532
75°	0	0	0
80°	0	0	515
85°	0	0	0



TEST NUMBER: P250135

CATALOG NUMBER: LSR8B90D010 EC8B90835 8LBM0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1089.4	11.5
10°-20°	2634.9	27.9
20°-30°	3088.2	32.7
30°-40°	2031.9	21.5
40°-50°	530.2	5.6
50°-60°	65.2	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°	6812.5	72.0
0°-40°	8844.4	93.5
0°-60°	9439.9	99.8
0°-90°	9456.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9456.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12000	12000	12000	12000	12000	
5°	12184	11837	11446	11682	11986	###
15°	9946	9383	8905	9383	10116	2773
25°	6833	6766	6717	6830	7084	3081
35°	3107	3177	3285	3317	3370	1946
45°	604	569	531	616	718	541
55°	47	50	56	56	52	62
65°	18	15	15	12	12	12
75°	0	3	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P250135

CATALOG NUMBER: LSR8B90D010 EC8B90835 8LBM0WH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	12000.5	12000.5	12000.5	12000.5	12000.5	12000.5	12000.5	12000.5	12000.5
1°	12009.2	12026.8	12032.6	12050.1	12023.9	12006.4	11983.0	11965.5	11968.4
2°	12061.8	12070.5	12038.4	12026.8	11980.1	11965.5	11948.0	11945.0	11948.0
3°	12117.2	12099.7	12015.1	11936.3	11866.3	11857.5	11889.6	11936.3	11962.5
4°	12161.0	12114.3	11936.3	11790.4	11679.5	11670.8	11799.2	11918.8	11968.4
5°	12184.3	12099.7	11837.1	11592.0	11446.2	11501.6	11682.5	11895.4	11985.9
6°	12152.2	12026.8	11685.4	11358.6	11192.3	11265.2	11530.8	11840.0	11974.2
7°	12070.5	11910.1	11489.9	11104.8	10900.5	11014.3	11352.8	11746.6	11930.5
8°	11918.8	11726.2	11241.9	10810.1	10608.7	10737.1	11134.0	11612.4	11825.5
9°	11720.4	11507.4	10996.8	10541.6	10325.7	10477.4	10906.4	11434.4	11679.5
10°	11484.1	11256.5	10725.5	10261.6	10066.1	10209.0	10661.3	11227.3	11481.1
11°	11206.9	10988.0	10454.1	9999.0	9812.2	9952.3	10416.2	10979.3	11253.5
12°	10906.4	10705.0	10177.0	9745.1	9570.1	9704.3	10153.6	10722.5	10993.9
13°	10605.8	10404.5	9908.5	9500.0	9339.5	9467.9	9896.8	10442.5	10713.8
14°	10282.0	10098.1	9640.1	9266.6	9120.7	9243.2	9634.2	10159.4	10416.2
15°	9946.4	9800.5	9383.3	9041.9	8904.8	9021.5	9383.3	9867.6	10115.6
16°	9631.3	9497.1	9135.3	8820.2	8706.4	8799.8	9129.5	9575.9	9812.2
17°	9310.3	9187.8	8887.3	8601.4	8499.3	8589.7	8869.8	9281.2	9494.2
18°	8989.4	8887.3	8616.0	8370.9	8280.5	8362.1	8613.1	8983.6	9176.1
19°	8691.8	8598.4	8368.0	8160.8	8079.1	8152.0	8388.4	8697.7	8890.2
20°	8385.5	8309.6	8108.3	7939.1	7863.2	7930.3	8114.1	8414.7	8583.9
21°	8090.8	8023.7	7848.6	7705.6	7644.4	7699.8	7869.0	8140.4	8289.2
22°	7784.4	7746.5	7589.0	7469.3	7428.5	7463.5	7618.1	7851.5	7991.6
23°	7483.9	7448.9	7329.2	7230.1	7195.0	7230.1	7367.2	7577.3	7702.8
24°	7180.5	7142.5	7055.0	6990.8	6961.6	6990.8	7107.5	7285.5	7405.1
25°	6833.3	6827.4	6766.2	6731.1	6716.6	6748.6	6830.4	6985.0	7084.2
26°	6500.6	6483.1	6465.6	6459.8	6462.7	6480.2	6547.3	6664.0	6742.8
27°	6092.2	6118.4	6144.6	6179.7	6191.3	6206.0	6238.0	6322.6	6381.0
28°	5701.2	5750.8	5815.0	5885.0	5917.1	5917.1	5920.0	5966.7	6016.3
29°	5313.1	5365.6	5467.8	5572.8	5616.6	5610.7	5587.4	5607.8	5637.0
30°	4907.6	4974.7	5111.8	5249.0	5313.1	5289.8	5246.0	5225.6	5243.1
31°	4510.8	4577.9	4729.6	4878.4	4963.0	4936.8	4860.9	4846.3	4855.0
32°	4131.5	4198.6	4338.6	4496.1	4592.5	4557.5	4478.7	4455.3	4458.2
33°	3763.8	3816.4	3944.7	4090.6	4169.4	4160.6	4096.4	4067.3	4070.2
34°	3416.6	3460.4	3556.6	3667.6	3743.4	3740.5	3693.8	3696.7	3705.5
35°	3107.4	3130.7	3177.3	3238.7	3285.4	3311.6	3317.4	3340.8	3370.0
37.5°	2348.8	2357.5	2302.1	2240.8	2229.1	2305.0	2436.3	2550.1	2593.9
40°	1628.1	1607.7	1537.6	1429.7	1397.6	1482.2	1648.5	1809.0	1867.3
42.5°	1012.5	1003.7	959.9	878.3	849.1	898.7	1024.1	1146.7	1205.0
45°	604.0	592.3	568.9	536.9	531.0	551.4	615.6	685.6	717.8
47.5°	347.2	344.3	329.7	318.0	315.1	329.7	358.9	399.7	408.5
50°	189.6	186.8	183.8	183.8	183.8	192.5	207.2	218.8	224.7
52.5°	93.4	96.3	93.4	96.3	99.2	105.0	102.1	113.8	113.8
55°	46.7	43.8	49.6	55.5	55.5	55.5	55.5	55.5	52.5
57.5°	35.0	37.9	32.1	35.0	32.1	32.1	29.2	32.1	35.0



TEST NUMBER: P250135

CATALOG NUMBER: LSR8B90D010 EC8B90835 8LBM0WH

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	23.3	20.4	23.3	26.3	29.2	26.3	20.4	23.3	26.3
62.5°	11.6	11.6	11.6	17.5	26.3	20.4	17.5	14.6	14.6
65°	17.5	11.6	14.6	17.5	14.6	14.6	11.6	14.6	11.6
67.5°	8.8	14.6	8.8	5.9	8.8	11.6	8.8	5.9	5.9
70°	0.0	2.9	2.9	8.8	8.8	8.8	8.8	5.9	5.9
72.5°	2.9	2.9	2.9	5.9	2.9	5.9	2.9	2.9	5.9
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)