

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: P250149

Luminaire Tested: **LSR8B90D010 EC8B90850 8LBM0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250149
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 EC8B90850 8LBM0WH
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9578.0 lumens
Efficiency: N/A
Efficacy: 111.2 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

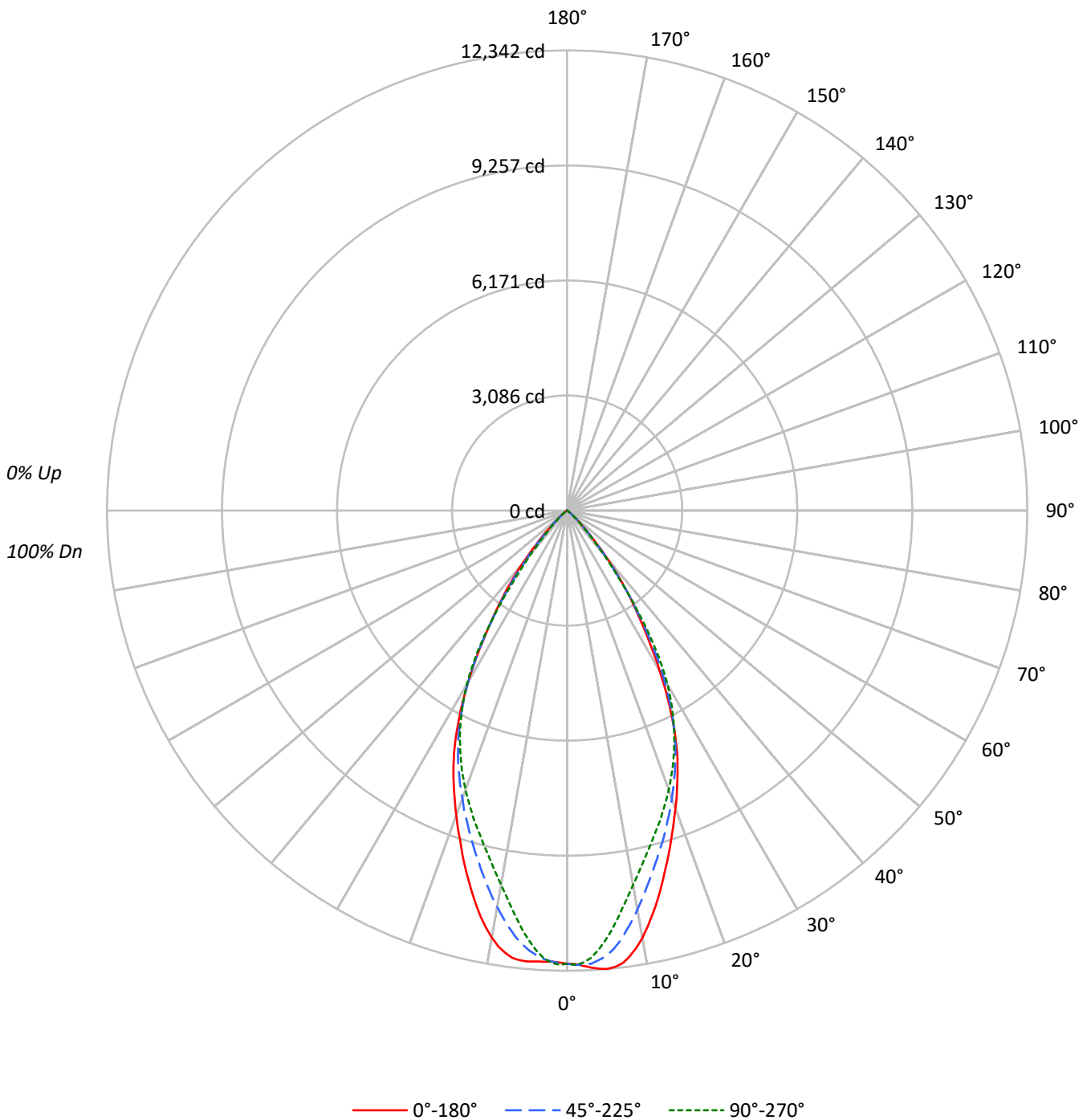
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	374825	374825	374825
5°	382020	358876	375798
10°	364228	319257	364137
15°	321629	287946	327098
20°	278723	261361	285316
25°	235494	231473	244143
30°	176997	191625	189100
35°	118485	125269	128495
40°	66383	56983	76136
45°	26680	23457	31704
50°	9216	8933	10919
55°	2543	3021	2860
60°	1455	1826	1640
65°	1291	1080	861
70°	0	802	532
75°	0	0	0
80°	0	0	533
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1103.5	11.5
10°-20°	2668.9	27.9
20°-30°	3128.1	32.7
30°-40°	2058.1	21.5
40°-50°	537.1	5.6
50°-60°	66.1	0.7
60°-70°	13.7	0.1
70°-80°	2.6	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°	6900.4	72.0
0°-40°	8958.5	93.5
0°-60°	9561.7	99.8
0°-90°	9578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9578.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12155	12155	12155	12155	12155	
5°	12342	11990	11594	11833	12140	###
15°	10075	9504	9020	9504	10246	2808
25°	6921	6854	6803	6918	7176	3120
35°	3148	3218	3328	3360	3413	1971
45°	612	576	538	624	727	548
55°	47	50	56	56	53	63
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	12155.3	12155.3	12155.3	12155.3	12155.3	12155.3	12155.3	12155.3	12155.3
1°	12164.2	12181.9	12187.8	12205.6	12179.0	12161.3	12137.6	12119.8	12122.8
2°	12217.4	12226.3	12193.7	12181.9	12134.7	12119.8	12102.1	12099.2	12102.1
3°	12273.6	12255.8	12170.1	12090.3	12019.4	12010.5	12043.0	12090.3	12116.9
4°	12317.9	12270.6	12090.3	11942.5	11830.2	11821.4	11951.4	12072.5	12122.8
5°	12341.5	12255.8	11989.8	11741.6	11593.8	11649.9	11833.2	12048.9	12140.5
6°	12309.0	12181.9	11836.1	11505.2	11336.7	11410.6	11679.5	11992.8	12128.7
7°	12226.3	12063.7	11638.2	11248.0	11041.1	11156.4	11499.2	11898.2	12084.4
8°	12072.5	11877.5	11386.9	10949.5	10745.6	10875.6	11277.6	11762.2	11978.0
9°	11871.6	11655.9	11138.7	10677.6	10459.0	10612.6	11047.1	11582.0	11830.2
10°	11632.2	11401.7	10863.8	10394.0	10196.0	10340.7	10798.8	11372.1	11629.3
11°	11351.4	11129.8	10589.0	10128.0	9938.8	10080.7	10550.6	11121.0	11398.7
12°	11047.1	10843.2	10308.3	9870.8	9693.5	9829.5	10284.6	10860.9	11135.7
13°	10742.6	10538.7	10036.4	9622.6	9460.0	9590.1	10024.5	10577.2	10852.0
14°	10414.6	10228.4	9764.5	9386.1	9238.4	9362.5	9758.5	10290.5	10550.6
15°	10074.8	9927.0	9504.4	9158.6	9019.7	9137.9	9504.4	9994.9	10246.1
16°	9755.6	9619.6	9253.2	8934.0	8818.8	8913.3	9247.3	9699.5	9938.8
17°	9430.5	9306.4	9001.9	8712.3	8608.9	8700.5	8984.2	9401.0	9616.7
18°	9105.4	9001.9	8727.2	8478.9	8387.3	8470.0	8724.2	9099.5	9294.5
19°	8804.0	8709.4	8475.9	8266.1	8183.4	8257.2	8496.6	8809.9	9004.9
20°	8493.7	8416.8	8212.9	8041.5	7964.6	8032.6	8218.8	8523.2	8694.6
21°	8195.2	8127.2	7949.9	7805.0	7743.0	7799.2	7970.6	8245.4	8396.1
22°	7884.9	7846.5	7686.9	7565.7	7524.3	7559.7	7716.4	7952.8	8094.7
23°	7580.4	7545.0	7423.8	7323.4	7287.9	7323.4	7462.3	7675.0	7802.1
24°	7273.1	7234.7	7146.0	7081.0	7051.5	7081.0	7199.2	7379.5	7500.7
25°	6921.4	6915.5	6853.5	6818.0	6803.2	6835.7	6918.5	7075.1	7175.6
26°	6584.5	6566.8	6549.0	6543.1	6546.1	6563.8	6631.8	6750.0	6829.8
27°	6170.8	6197.4	6223.9	6259.4	6271.2	6286.0	6318.5	6404.2	6463.3
28°	5774.7	5825.0	5890.0	5960.9	5993.5	5993.5	5996.4	6043.6	6093.9
29°	5381.7	5434.8	5538.3	5644.7	5689.0	5683.1	5659.5	5680.1	5709.7
30°	4970.9	5038.9	5177.8	5316.7	5381.7	5358.1	5313.7	5293.0	5310.8
31°	4569.0	4637.0	4790.6	4941.3	5027.0	5000.5	4923.6	4908.8	4917.7
32°	4184.8	4252.8	4394.6	4554.2	4651.7	4616.3	4536.4	4512.8	4515.8
33°	3812.4	3865.6	3995.6	4143.4	4223.2	4214.3	4149.3	4119.8	4122.7
34°	3460.7	3505.0	3602.5	3714.9	3791.7	3788.7	3741.4	3744.4	3753.3
35°	3147.5	3171.1	3218.3	3280.4	3327.7	3354.3	3360.2	3383.9	3413.4
37.5°	2379.1	2387.9	2331.8	2269.7	2257.9	2334.7	2467.7	2583.0	2627.3
40°	1649.1	1628.4	1557.5	1448.1	1415.6	1501.3	1669.8	1832.3	1891.4
42.5°	1025.5	1016.6	972.3	889.6	860.0	910.3	1037.3	1161.5	1220.6
45°	611.8	599.9	576.3	543.8	537.9	558.5	623.6	694.5	727.0
47.5°	351.7	348.8	333.9	322.2	319.2	333.9	363.5	404.9	413.8
50°	192.1	189.2	186.2	186.2	186.2	195.0	209.8	221.6	227.6
52.5°	94.6	97.5	94.6	97.5	100.5	106.4	103.4	115.3	115.3
55°	47.3	44.3	50.3	56.2	56.2	56.2	56.2	56.2	53.2
57.5°	35.4	38.4	32.5	35.4	32.5	32.5	29.6	32.5	35.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	23.6	20.7	23.6	26.6	29.6	26.6	20.7	23.6	26.6
62.5°	11.8	11.8	11.8	17.7	26.6	20.7	17.7	14.8	14.8
65°	17.7	11.8	14.8	17.7	14.8	14.8	11.8	14.8	11.8
67.5°	8.9	14.8	8.9	5.9	8.9	11.8	8.9	5.9	5.9
70°	0.0	3.0	3.0	8.9	8.9	8.9	8.9	5.9	5.9
72.5°	3.0	3.0	3.0	5.9	3.0	5.9	3.0	3.0	5.9
75°	0.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0
77.5°	3.0	0.0	3.0	3.0	0.0	0.0	0.0	3.0	0.0
80°	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0
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)