

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: P247383

Luminaire Tested: **LSR8B90D010 EC8B90827 8LBW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247383
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: LSR8B90D010 EC8B90827 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: 9194.0 lumens
Efficiency: N/A
Efficacy: 106.8 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

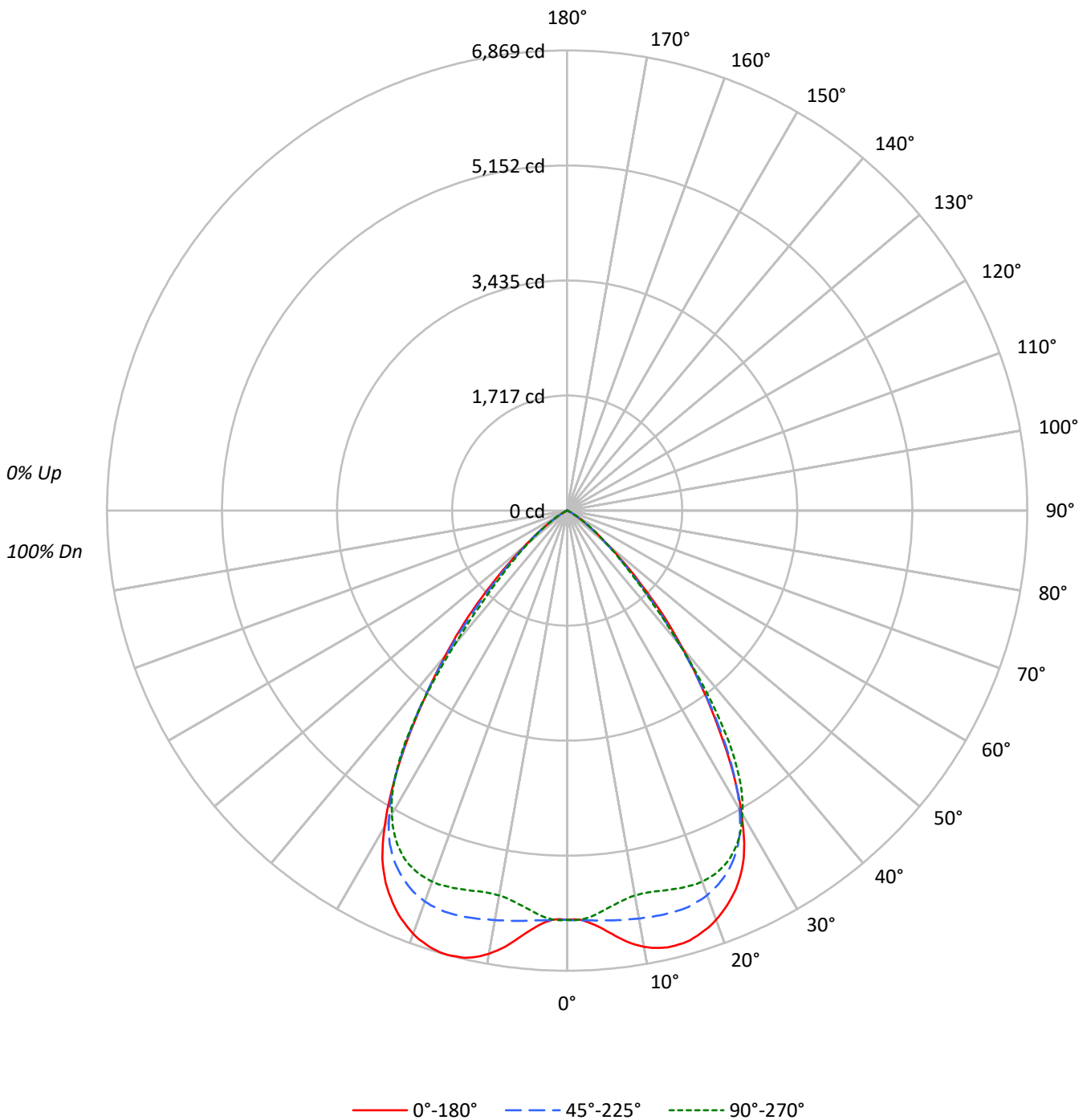
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	81	78	76		
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	76	76	76	75	73	71	70		
4	94	85	79	74	92	84	79	74	82	77	73	80	76	72	78	74	71	70	70	70	69	67	65	64		
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64	64	64	63	61	59	58		
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58	58	58	57	55	53	53		
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	53	53	53	52	50	48	49		
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	48	46	44	45		
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	50	47	45	45	45	44	42	40	42		
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42	42	42	41	39	37	42		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	188450	188450	188450
5°	194234	185796	194553
10°	207044	182659	210298
15°	213416	187142	219296
20°	213408	193391	220650
25°	206873	195213	214294
30°	185158	186266	194032
35°	147471	158516	155681
40°	107744	104817	113907
45°	68833	61362	74833
50°	37236	36488	39981
55°	19118	19822	19118
60°	8326	8326	6081
65°	1707	2277	1897
70°	1163	1641	1866
75°	0	929	0
80°	462	462	1847
85°	0	920	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	589.1	6.4
10°-20°	1772.3	19.3
20°-30°	2697.5	29.3
30°-40°	2510.4	27.3
40°-50°	1221.8	13.3
50°-60°	348.1	3.8
60°-70°	45.5	0.5
70°-80°	7.2	0.1
80°-90°	2.2	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°	5058.8	55.0
0°-40°	7569.2	82.3
0°-60°	9139.1	99.4
0°-90°	9194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9194.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6111	6111	6111	6111	6111	
5°	6275	6137	6002	6142	6285	611
15°	6685	6200	5862	6259	6869	1881
25°	6080	5815	5738	5942	6298	2760
35°	3918	3972	4211	4167	4136	2436
45°	1578	1462	1407	1576	1716	1248
55°	356	356	369	361	356	349
65°	23	28	31	28	26	45
75°	0	3	8	3	0	5
85°	0	3	3	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°	6111.3	6111.3	6111.3	6111.3	6111.3	6111.3	6111.3	6111.3	6111.3
1°	6103.5	6111.3	6116.5	6113.9	6116.5	6113.9	6108.7	6098.3	6098.3
2°	6113.9	6124.3	6121.6	6116.5	6108.7	6108.7	6124.3	6103.5	6108.7
3°	6155.4	6155.4	6124.3	6095.8	6085.3	6095.8	6121.6	6137.2	6150.3
4°	6207.3	6197.0	6134.7	6069.8	6049.0	6074.9	6132.1	6181.4	6207.3
5°	6274.9	6243.7	6137.2	6038.6	6002.3	6041.2	6142.5	6235.8	6285.2
6°	6352.8	6305.9	6152.8	6004.8	5958.1	6012.6	6158.1	6300.8	6376.0
7°	6430.7	6355.3	6160.6	5978.9	5919.1	5994.5	6171.0	6373.5	6472.1
8°	6503.3	6402.0	6168.4	5955.6	5882.8	5960.7	6181.4	6438.3	6568.2
9°	6563.1	6446.1	6173.6	5937.4	5851.7	5940.0	6194.4	6495.5	6648.6
10°	6612.3	6479.9	6184.0	5926.9	5833.5	5929.6	6207.3	6544.9	6716.2
11°	6651.3	6503.3	6186.6	5921.8	5825.7	5921.8	6217.7	6594.1	6773.3
12°	6674.6	6524.0	6194.4	5924.4	5828.3	5929.6	6233.3	6615.0	6820.0
13°	6690.2	6531.8	6199.5	5932.2	5833.5	5934.7	6243.7	6633.2	6851.1
14°	6690.2	6526.7	6199.5	5940.0	5849.1	5945.1	6251.5	6646.1	6858.9
15°	6685.1	6524.0	6199.5	5952.9	5862.1	5955.6	6259.3	6653.9	6869.3
16°	6669.5	6508.4	6197.0	5960.7	5875.0	5965.9	6261.8	6648.6	6861.6
17°	6638.3	6500.8	6186.6	5968.5	5888.0	5976.3	6261.8	6635.7	6843.3
18°	6596.7	6446.1	6160.6	5960.7	5890.6	5973.7	6246.3	6601.9	6809.7
19°	6560.4	6415.1	6142.5	5955.6	5901.0	5981.5	6235.8	6578.5	6773.3
20°	6503.3	6363.1	6111.3	5940.0	5893.3	5965.9	6210.0	6537.1	6724.0
21°	6433.2	6303.4	6067.1	5914.0	5880.2	5945.1	6173.6	6479.9	6656.4
22°	6363.1	6235.8	6020.4	5888.0	5859.5	5926.9	6134.7	6420.2	6586.3
23°	6280.0	6160.6	5960.7	5843.9	5828.3	5885.5	6080.2	6355.3	6503.3
24°	6186.6	6072.4	5895.8	5794.5	5789.4	5841.3	6017.9	6269.6	6404.7
25°	6080.2	5978.9	5815.4	5732.2	5737.5	5781.6	5942.5	6173.6	6298.3
26°	5952.9	5859.5	5721.9	5657.0	5664.8	5708.9	5856.8	6062.0	6181.4
27°	5810.1	5724.4	5612.9	5566.1	5586.9	5625.8	5753.1	5940.0	6036.0
28°	5631.0	5563.5	5483.0	5462.3	5488.3	5532.4	5638.8	5792.0	5877.7
29°	5423.3	5387.0	5324.7	5335.0	5371.4	5407.7	5496.0	5607.6	5675.2
30°	5200.1	5184.5	5148.1	5189.7	5231.2	5262.4	5322.1	5397.3	5449.3
31°	4971.6	4953.4	4958.6	5026.1	5088.4	5109.1	5142.9	5179.2	5218.2
32°	4714.6	4709.4	4730.1	4828.8	4909.3	4919.7	4922.2	4932.6	4953.4
33°	4452.4	4444.6	4486.1	4608.2	4699.0	4706.8	4686.0	4675.6	4691.2
34°	4179.8	4179.8	4234.3	4361.5	4468.0	4475.7	4434.2	4429.0	4413.4
35°	3917.5	3909.7	3972.0	4091.5	4210.9	4213.5	4166.7	4138.2	4135.6
37.5°	3268.5	3255.6	3276.3	3338.6	3426.9	3473.7	3468.4	3458.1	3450.3
40°	2676.6	2645.5	2603.9	2578.0	2603.9	2700.0	2783.0	2822.0	2829.7
42.5°	2118.5	2074.3	1986.1	1913.3	1923.8	2012.0	2139.2	2227.5	2271.6
45°	1578.4	1534.3	1461.6	1407.1	1407.1	1469.4	1575.8	1666.7	1716.0
47.5°	1126.7	1098.2	1056.6	1033.2	1048.8	1074.8	1134.5	1202.1	1222.8
50°	776.2	768.4	745.1	745.1	760.6	781.5	791.8	825.6	833.4
52.5°	542.6	529.6	532.2	534.8	547.8	550.4	565.9	558.1	571.2
55°	355.6	355.6	355.6	363.4	368.7	368.7	360.9	355.6	355.6
57.5°	225.9	220.7	223.2	228.5	228.5	220.7	207.7	205.1	192.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	135.0	135.0	137.6	137.6	135.0	127.2	114.2	103.9	98.6
62.5°	70.1	72.7	72.7	85.7	72.7	64.9	59.7	46.7	44.1
65°	23.4	28.5	28.5	28.5	31.2	28.5	28.5	26.0	26.0
67.5°	15.6	18.2	18.2	20.7	20.7	20.7	20.7	26.0	18.2
70°	12.9	12.9	15.6	18.2	18.2	20.7	15.6	12.9	20.7
72.5°	7.8	10.4	7.8	12.9	10.4	10.4	10.4	10.4	10.4
75°	0.0	5.2	2.6	0.0	7.8	5.2	2.6	5.2	0.0
77.5°	2.6	2.6	2.6	2.6	5.2	5.2	5.2	5.2	2.6
80°	2.6	2.6	5.2	2.6	2.6	5.2	0.0	0.0	10.4
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	0.0	2.6	2.6
85°	0.0	2.6	2.6	2.6	2.6	2.6	5.2	5.2	0.0
87.5°	0.0	2.6	0.0	2.6	0.0	0.0	0.0	5.2	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)