

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: P247415

Luminaire Tested: **LSR8B90D010 EC8B90940 8LBW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247415
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 EC8B90940 8LBW0WH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8729.0 lumens
Efficiency: N/A
Efficacy: 101.4 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

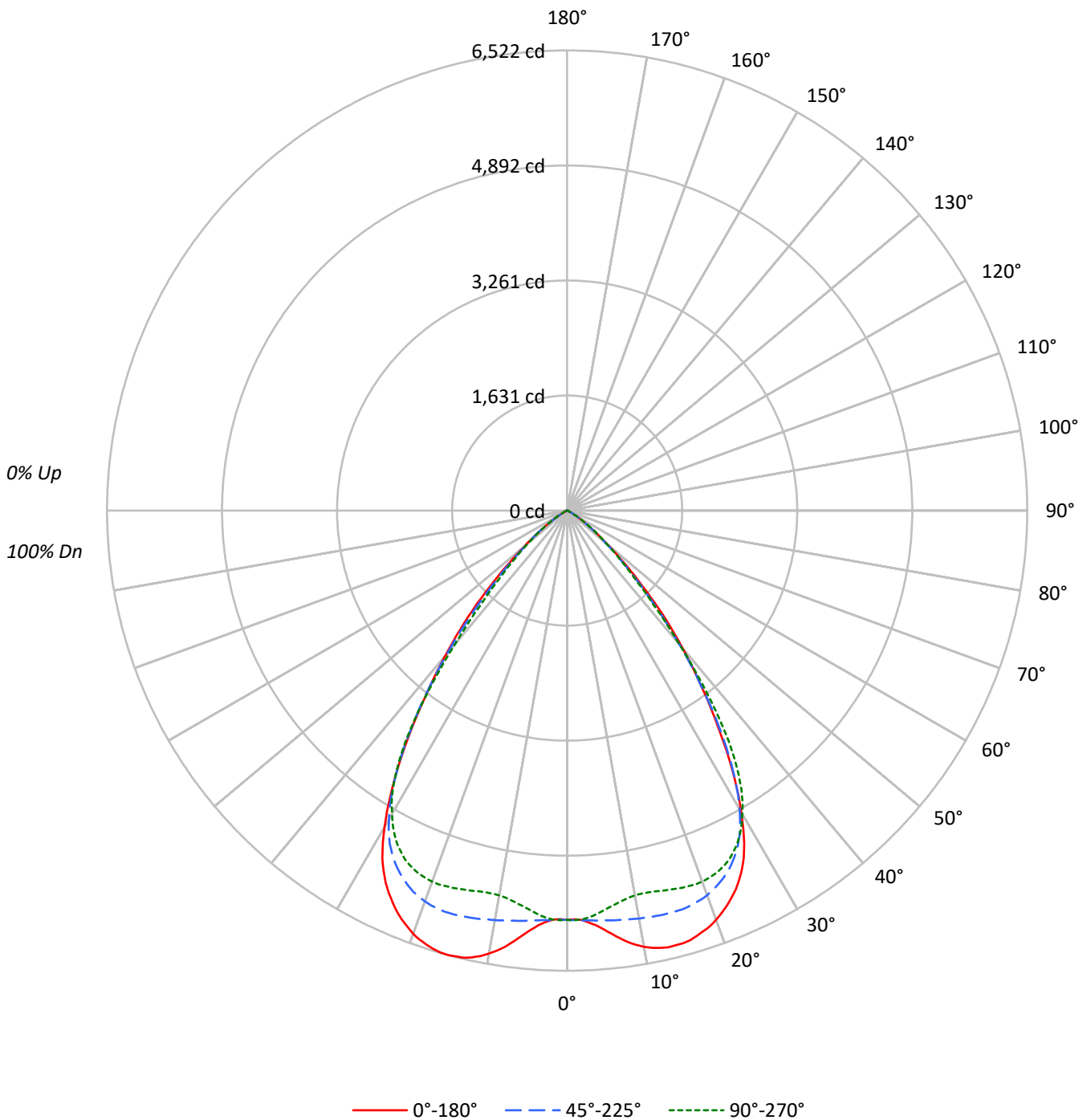
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	81	78	76	76		
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	76	76	76	73	71	70	70		
4	94	85	79	74	92	84	79	74	82	77	73	80	76	72	78	74	71	70	70	70	67	65	64	64		
5	88	79	72	67	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	61	59	58	58		
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58	58	58	55	53	52	52		
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	53	53	53	50	48	47	47		
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	46	44	43	43		
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	50	47	45	45	45	42	40	39	39		
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42	42	42	39	37	36	36		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	178918	178918	178918
5°	184409	176398	184712
10°	196574	173422	199661
15°	202622	177677	208206
20°	202615	183608	209490
25°	196408	185340	203454
30°	175794	176844	184218
35°	140014	150498	147810
40°	102293	99516	108146
45°	65353	58257	71052
50°	35356	34646	37956
55°	18150	18817	18150
60°	7900	7900	5773
65°	1620	2160	1802
70°	1109	1551	1776
75°	0	882	0
80°	426	426	1740
85°	0	849	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	559.3	6.4
10°-20°	1682.6	19.3
20°-30°	2561.1	29.3
30°-40°	2383.4	27.3
40°-50°	1160.0	13.3
50°-60°	330.5	3.8
60°-70°	43.2	0.5
70°-80°	6.8	0.1
80°-90°	2.1	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°	4803.0	55.0
0°-40°	7186.4	82.3
0°-60°	8676.9	99.4
0°-90°	8729.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8729.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5802	5802	5802	5802	5802	
5°	5958	5827	5699	5832	5967	580
15°	6347	5886	5566	5943	6522	1786
25°	5773	5521	5447	5642	5980	2620
35°	3719	3771	3998	3956	3926	2313
45°	1499	1388	1336	1496	1629	1185
55°	338	338	350	343	338	331
65°	22	27	30	27	25	42
75°	0	2	7	2	0	4
85°	0	2	2	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°	5802.2	5802.2	5802.2	5802.2	5802.2	5802.2	5802.2	5802.2	5802.2
1°	5794.8	5802.2	5807.1	5804.7	5807.1	5804.7	5799.7	5789.9	5789.9
2°	5804.7	5814.5	5812.0	5807.1	5799.7	5799.7	5814.5	5794.8	5799.7
3°	5844.1	5844.1	5814.5	5787.5	5777.5	5787.5	5812.0	5826.8	5839.2
4°	5893.4	5883.5	5824.4	5762.8	5743.0	5767.7	5822.0	5868.7	5893.4
5°	5957.5	5927.9	5826.8	5733.2	5698.7	5735.6	5831.8	5920.5	5967.3
6°	6031.5	5987.0	5841.6	5701.1	5656.8	5708.5	5846.6	5982.1	6053.6
7°	6105.4	6033.9	5849.0	5676.5	5619.8	5691.3	5858.9	6051.1	6144.8
8°	6174.4	6078.2	5856.4	5654.3	5585.3	5659.2	5868.7	6112.7	6236.0
9°	6231.1	6120.1	5861.3	5637.1	5555.7	5639.5	5881.1	6167.0	6312.4
10°	6277.9	6152.2	5871.3	5627.2	5538.5	5629.7	5893.4	6213.9	6376.5
11°	6314.9	6174.4	5873.7	5622.3	5531.1	5622.3	5903.2	6260.6	6430.8
12°	6337.0	6194.1	5881.1	5624.7	5533.5	5629.7	5918.0	6280.4	6475.1
13°	6351.8	6201.5	5886.0	5632.1	5538.5	5634.6	5927.9	6297.7	6504.6
14°	6351.8	6196.6	5886.0	5639.5	5553.3	5644.4	5935.3	6309.9	6512.0
15°	6347.0	6194.1	5886.0	5651.8	5565.6	5654.3	5942.7	6317.4	6521.9
16°	6332.2	6179.3	5883.5	5659.2	5577.9	5664.2	5945.1	6312.4	6514.6
17°	6302.5	6172.0	5873.7	5666.6	5590.2	5674.0	5945.1	6300.1	6497.2
18°	6263.1	6120.1	5849.0	5659.2	5592.7	5671.6	5930.4	6268.0	6465.3
19°	6228.6	6090.6	5831.8	5654.3	5602.5	5679.0	5920.5	6245.8	6430.8
20°	6174.4	6041.3	5802.2	5639.5	5595.2	5664.2	5895.9	6206.5	6383.9
21°	6107.8	5984.6	5760.3	5614.9	5582.8	5644.4	5861.3	6152.2	6319.8
22°	6041.3	5920.5	5715.9	5590.2	5563.1	5627.2	5824.4	6095.5	6253.2
23°	5962.4	5849.0	5659.2	5548.3	5533.5	5587.8	5772.6	6033.9	6174.4
24°	5873.7	5765.2	5597.6	5501.5	5496.6	5545.9	5713.5	5952.5	6080.8
25°	5772.6	5676.5	5521.2	5442.3	5447.3	5489.2	5642.0	5861.3	5979.7
26°	5651.8	5563.1	5432.5	5370.9	5378.3	5420.2	5560.6	5755.4	5868.7
27°	5516.3	5434.9	5329.0	5284.5	5304.3	5341.3	5462.1	5639.5	5730.7
28°	5346.2	5282.1	5205.7	5186.0	5210.7	5252.6	5353.6	5499.0	5580.4
29°	5149.0	5114.5	5055.4	5065.2	5099.7	5134.2	5218.0	5324.0	5388.1
30°	4937.1	4922.3	4887.8	4927.2	4966.6	4996.2	5052.9	5124.4	5173.7
31°	4720.2	4702.9	4707.8	4771.9	4831.0	4850.7	4882.8	4917.3	4954.3
32°	4476.2	4471.2	4490.9	4584.6	4661.0	4670.9	4673.3	4683.1	4702.9
33°	4227.2	4219.8	4259.3	4375.1	4461.3	4468.8	4449.0	4439.1	4453.9
34°	3968.4	3968.4	4020.1	4141.0	4242.0	4249.3	4209.9	4205.0	4190.2
35°	3719.4	3712.0	3771.2	3884.6	3997.9	4000.4	3956.0	3928.9	3926.5
37.5°	3103.2	3090.9	3110.6	3169.7	3253.5	3298.0	3293.0	3283.2	3275.8
40°	2541.2	2511.7	2472.2	2447.6	2472.2	2563.4	2642.3	2679.3	2686.6
42.5°	2011.3	1969.4	1885.6	1816.5	1826.5	1910.3	2031.0	2114.8	2156.7
45°	1498.6	1456.7	1387.7	1335.9	1335.9	1395.1	1496.1	1582.4	1629.3
47.5°	1069.7	1042.6	1003.2	981.0	995.8	1020.4	1077.1	1141.3	1160.9
50°	737.0	729.6	707.4	707.4	722.2	741.9	751.8	783.8	791.2
52.5°	515.2	502.8	505.2	507.8	520.1	522.6	537.3	529.9	542.3
55°	337.6	337.6	337.6	345.0	350.0	350.0	342.6	337.6	337.6
57.5°	214.5	209.5	211.9	216.9	216.9	209.5	197.2	194.7	182.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	128.1	128.1	130.7	130.7	128.1	120.7	108.5	98.6	93.6
62.5°	66.6	69.0	69.0	81.4	69.0	61.6	56.7	44.3	41.9
65°	22.2	27.1	27.1	27.1	29.6	27.1	27.1	24.7	24.7
67.5°	14.8	17.2	17.2	19.7	19.7	19.7	19.7	24.7	17.2
70°	12.3	12.3	14.8	17.2	17.2	19.7	14.8	12.3	19.7
72.5°	7.4	9.8	7.4	12.3	9.8	9.8	9.8	9.8	9.8
75°	0.0	5.0	2.4	0.0	7.4	5.0	2.4	5.0	0.0
77.5°	2.4	2.4	2.4	2.4	5.0	5.0	5.0	5.0	2.4
80°	2.4	2.4	5.0	2.4	2.4	5.0	0.0	0.0	9.8
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	0.0	2.4	2.4
85°	0.0	2.4	2.4	2.4	2.4	2.4	5.0	5.0	0.0
87.5°	0.0	2.4	0.0	2.4	0.0	0.0	0.0	5.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)