

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: P247387

Luminaire Tested: **LSR8B90D010 EC8B90830 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247387  
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 EC8B90830 8LBW0WH  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9424.0 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

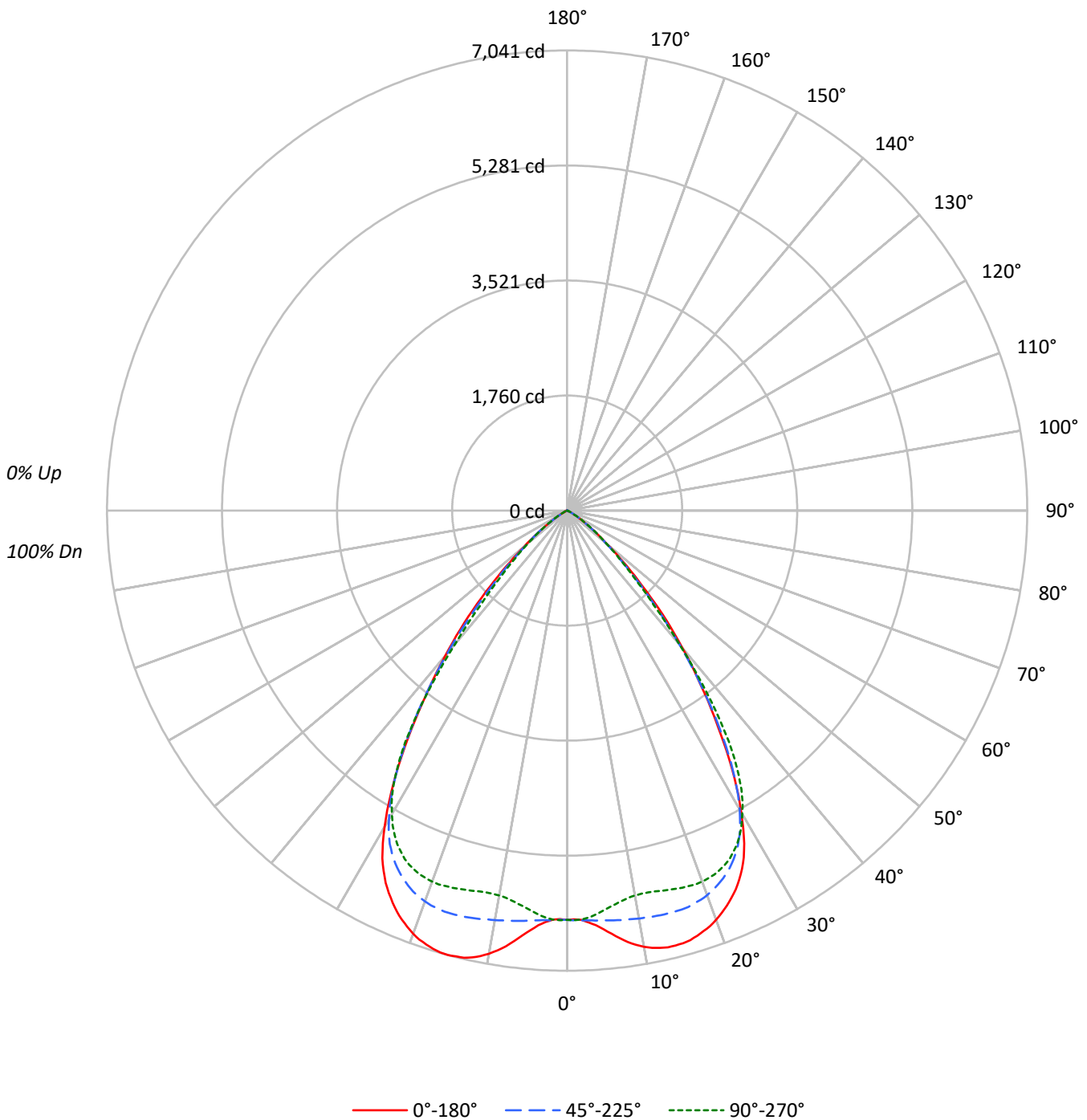
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P247387

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBW0WH

### Luminous Intensity Polar Plot





TEST NUMBER: P247387

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBW0WH

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	193162	193162	193162
5°	199091	190442	199422
10°	212223	187230	215558
15°	218754	191822	224784
20°	218747	198228	226170
25°	212048	200096	219653
30°	189791	190923	198885
35°	151164	162480	159577
40°	110441	107442	116757
45°	70555	62897	76708
50°	38167	37400	40978
55°	19596	20316	19596
60°	8529	8529	6235
65°	1751	2335	1941
70°	1199	1677	1911
75°	0	953	0
80°	462	462	1882
85°	0	920	0



TEST NUMBER: P247387

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBW0WH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	603.8	6.4
10°-20°	1816.6	19.3
20°-30°	2765.0	29.3
30°-40°	2573.2	27.3
40°-50°	1252.4	13.3
50°-60°	356.8	3.8
60°-70°	46.6	0.5
70°-80°	7.4	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°	5185.4	55.0
0°-40°	7758.6	82.3
0°-60°	9367.8	99.4
0°-90°	9424.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9424.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6264	6264	6264	6264	6264	
5°	6432	6291	6152	6296	6442	626
15°	6852	6355	6009	6416	7041	1928
25°	6232	5961	5881	6091	6456	2829
35°	4016	4071	4316	4271	4239	2497
45°	1618	1498	1442	1615	1759	1279
55°	364	364	378	370	364	358
65°	24	29	32	29	27	46
75°	0	3	8	3	0	5
85°	0	3	3	5	0	1
90°	0	0	0	0	0	



TEST NUMBER: P247387

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBW0WH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	6264.1	6264.1	6264.1	6264.1	6264.1	6264.1	6264.1	6264.1	6264.1
1°	6256.1	6264.1	6269.5	6266.9	6269.5	6266.9	6261.5	6250.9	6250.9
2°	6266.9	6277.5	6274.8	6269.5	6261.5	6261.5	6277.5	6256.1	6261.5
3°	6309.4	6309.4	6277.5	6248.3	6237.5	6248.3	6274.8	6290.7	6304.1
4°	6362.6	6352.0	6288.1	6221.6	6200.3	6226.9	6285.5	6336.0	6362.6
5°	6431.8	6399.8	6290.7	6189.7	6152.4	6192.3	6296.1	6391.8	6442.5
6°	6511.7	6463.7	6306.7	6155.0	6107.2	6163.0	6312.1	6458.4	6535.6
7°	6591.5	6514.3	6314.7	6128.4	6067.2	6144.4	6325.4	6532.9	6634.0
8°	6666.0	6562.2	6322.7	6104.5	6030.0	6109.8	6336.0	6599.4	6732.5
9°	6727.2	6607.4	6328.0	6085.9	5998.1	6088.6	6349.3	6658.0	6815.0
10°	6777.7	6642.0	6338.7	6075.2	5979.5	6077.9	6362.6	6708.6	6884.2
11°	6817.7	6666.0	6341.4	6069.9	5971.5	6069.9	6373.2	6759.1	6942.8
12°	6841.6	6687.3	6349.3	6072.6	5974.1	6077.9	6389.2	6780.5	6990.7
13°	6857.6	6695.3	6354.6	6080.6	5979.5	6083.2	6399.8	6799.1	7022.5
14°	6857.6	6690.0	6354.6	6088.6	5995.5	6093.8	6407.8	6812.3	7030.5
15°	6852.3	6687.3	6354.6	6101.8	6008.7	6104.5	6415.8	6820.3	7041.2
16°	6836.3	6671.3	6352.0	6109.8	6022.0	6115.2	6418.5	6815.0	7033.3
17°	6804.3	6663.4	6341.4	6117.8	6035.3	6125.8	6418.5	6801.7	7014.5
18°	6761.7	6607.4	6314.7	6109.8	6037.9	6123.2	6402.6	6767.1	6980.0
19°	6724.5	6575.5	6296.1	6104.5	6048.6	6131.2	6391.8	6743.1	6942.8
20°	6666.0	6522.3	6264.1	6088.6	6040.7	6115.2	6365.3	6700.6	6892.2
21°	6594.2	6461.1	6218.9	6061.9	6027.3	6093.8	6328.0	6642.0	6823.0
22°	6522.3	6391.8	6171.0	6035.3	6006.1	6075.2	6288.1	6580.8	6751.1
23°	6437.1	6314.7	6109.8	5990.1	5974.1	6032.7	6232.3	6514.3	6666.0
24°	6341.4	6224.3	6043.3	5939.5	5934.2	5987.5	6168.4	6426.5	6564.9
25°	6232.3	6128.4	5960.8	5875.6	5881.0	5926.2	6091.2	6328.0	6455.8
26°	6101.8	6006.1	5865.0	5798.5	5806.5	5851.7	6003.3	6213.6	6336.0
27°	5955.5	5867.6	5753.3	5705.3	5726.7	5766.5	5897.0	6088.6	6187.0
28°	5771.9	5702.7	5620.2	5598.9	5625.6	5670.8	5779.9	5936.9	6024.7
29°	5559.0	5521.7	5457.9	5468.5	5505.7	5543.0	5633.4	5747.9	5817.1
30°	5330.2	5314.2	5276.9	5319.5	5362.0	5394.0	5455.2	5532.4	5585.6
31°	5096.0	5077.4	5082.6	5151.8	5215.7	5236.9	5271.6	5308.8	5348.8
32°	4832.6	4827.2	4848.4	4949.6	5032.1	5042.7	5045.4	5056.0	5077.4
33°	4563.8	4555.8	4598.4	4723.5	4816.6	4824.6	4803.2	4792.6	4808.6
34°	4284.3	4284.3	4340.2	4470.7	4579.8	4587.6	4545.1	4539.8	4523.8
35°	4015.6	4007.6	4071.4	4193.9	4316.2	4319.0	4271.0	4241.7	4239.1
37.5°	3350.3	3337.0	3358.3	3422.1	3512.6	3560.6	3555.2	3544.6	3536.6
40°	2743.6	2711.7	2669.1	2642.5	2669.1	2767.5	2852.7	2892.6	2900.5
42.5°	2171.5	2126.2	2035.8	1961.2	1971.9	2062.4	2192.7	2283.2	2328.4
45°	1617.9	1572.7	1498.2	1442.3	1442.3	1506.2	1615.3	1708.4	1759.0
47.5°	1154.9	1125.7	1083.1	1059.1	1075.1	1101.7	1162.9	1232.1	1253.4
50°	795.6	787.6	763.8	763.8	779.6	801.0	811.6	846.2	854.2
52.5°	556.2	542.8	545.5	548.2	561.5	564.2	580.1	572.1	585.4
55°	364.5	364.5	364.5	372.5	377.9	377.9	369.9	364.5	364.5
57.5°	231.6	226.2	228.8	234.2	234.2	226.2	212.9	210.2	196.9



TEST NUMBER: P247387

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBW0WH

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	138.3	138.3	141.1	141.1	138.3	130.3	117.1	106.5	101.1
62.5°	71.9	74.5	74.5	87.8	74.5	66.5	61.2	47.9	45.2
65°	24.0	29.2	29.2	29.2	32.0	29.2	29.2	26.6	26.6
67.5°	16.0	18.6	18.6	21.2	21.2	21.2	21.2	26.6	18.6
70°	13.3	13.3	16.0	18.6	18.6	21.2	16.0	13.3	21.2
72.5°	8.0	10.6	8.0	13.3	10.6	10.6	10.6	10.6	10.6
75°	0.0	5.4	2.6	0.0	8.0	5.4	2.6	5.4	0.0
77.5°	2.6	2.6	2.6	2.6	5.4	5.4	5.4	5.4	2.6
80°	2.6	2.6	5.4	2.6	2.6	5.4	0.0	0.0	10.6
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	5.4	5.4	0.0
87.5°	0.0	2.6	0.0	2.6	0.0	0.0	0.0	5.4	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)