

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: P247396

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247396  
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: LSR8B100D010 EC8B100840 8LBW0WH  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11233.0 lumens  
Efficiency: N/A  
Efficacy: 105.7 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

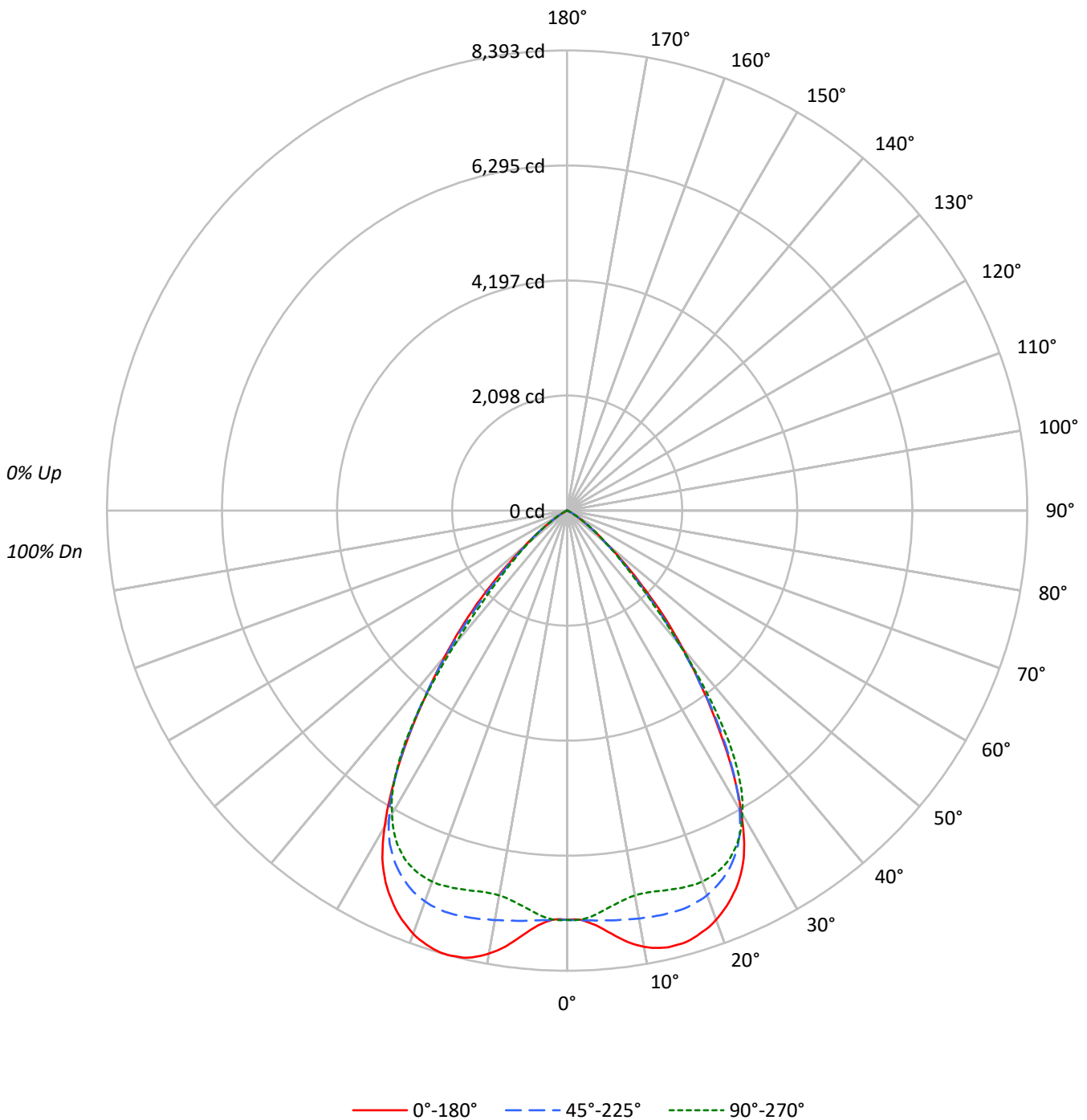
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92					92			
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84					84			
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78	76					76			
4	94	85	79	74	92	84	79	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	67	87	78	72	67	76	71	67	74	70	66	73	69	65	64					64			
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58					58			
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	53					53			
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49					49			
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42					42			

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

	0°	90°	180°
0°	230242	230242	230242
5°	237310	226999	237700
10°	252964	223170	256937
15°	260746	228644	267929
20°	260737	236277	269584
25°	252751	238506	261819
30°	226220	227573	237062
35°	180180	193668	190209
40°	131638	128064	139170
45°	84100	74973	91431
50°	45497	44581	48846
55°	23359	24214	23359
60°	10170	10170	7432
65°	2087	2780	2313
70°	1425	2002	2281
75°	0	1132	0
80°	550	550	2255
85°	0	1097	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	719.7	6.4
10°-20°	2165.3	19.3
20°-30°	3295.8	29.3
30°-40°	3067.1	27.3
40°-50°	1492.8	13.3
50°-60°	425.3	3.8
60°-70°	55.6	0.5
70°-80°	8.8	0.1
80°-90°	2.6	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°	6180.8	55.0
0°-40°	9247.9	82.3
0°-60°	11166.0	99.4
0°-90°	11233.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11233.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7467	7467	7467	7467	7467	
5°	7666	7498	7333	7505	7679	747
15°	8168	7574	7162	7647	8393	2298
25°	7429	7105	7010	7260	7695	3372
35°	4786	4853	5145	5091	5053	2976
45°	1928	1786	1719	1925	2097	1524
55°	434	434	450	441	434	426
65°	29	35	38	35	32	55
75°	0	3	10	3	0	6
85°	0	3	3	6	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°	7466.6	7466.6	7466.6	7466.6	7466.6	7466.6	7466.6	7466.6	7466.6
1°	7457.0	7466.6	7473.0	7469.8	7473.0	7469.8	7463.4	7450.8	7450.8
2°	7469.8	7482.5	7479.2	7473.0	7463.4	7463.4	7482.5	7457.0	7463.4
3°	7520.5	7520.5	7482.5	7447.6	7434.9	7447.6	7479.2	7498.3	7514.2
4°	7583.9	7571.3	7495.2	7415.9	7390.5	7422.2	7492.0	7552.2	7583.9
5°	7666.5	7628.3	7498.3	7377.8	7333.4	7380.9	7504.7	7618.8	7679.1
6°	7761.6	7704.5	7517.4	7336.5	7279.5	7346.1	7523.8	7698.2	7790.1
7°	7856.8	7764.8	7526.9	7304.8	7231.8	7323.9	7539.6	7787.0	7907.5
8°	7945.6	7821.8	7536.4	7276.4	7187.4	7282.6	7552.2	7866.2	8024.8
9°	8018.6	7875.7	7542.7	7254.2	7149.5	7257.3	7568.1	7936.1	8123.1
10°	8078.8	7917.0	7555.5	7241.4	7127.3	7244.6	7583.9	7996.4	8205.7
11°	8126.4	7945.6	7558.6	7235.1	7117.7	7235.1	7596.6	8056.6	8275.5
12°	8154.9	7970.9	7568.1	7238.2	7120.9	7244.6	7615.7	8082.0	8332.6
13°	8173.9	7980.4	7574.4	7247.8	7127.3	7250.9	7628.3	8104.2	8370.6
14°	8173.9	7974.2	7574.4	7257.3	7146.3	7263.6	7637.9	8120.0	8380.1
15°	8167.7	7970.9	7574.4	7273.1	7162.1	7276.4	7647.4	8129.5	8392.7
16°	8148.6	7951.9	7571.3	7282.6	7177.9	7289.0	7650.5	8123.1	8383.3
17°	8110.5	7942.5	7558.6	7292.2	7193.8	7301.7	7650.5	8107.4	8361.0
18°	8059.7	7875.7	7526.9	7282.6	7197.0	7298.5	7631.6	8066.1	8319.9
19°	8015.3	7837.8	7504.7	7276.4	7209.6	7308.1	7618.8	8037.5	8275.5
20°	7945.6	7774.3	7466.6	7257.3	7200.2	7289.0	7587.2	7986.8	8215.2
21°	7859.9	7701.3	7412.7	7225.6	7184.3	7263.6	7542.7	7917.0	8132.7
22°	7774.3	7618.8	7355.6	7193.8	7159.0	7241.4	7495.2	7844.0	8047.0
23°	7672.7	7526.9	7282.6	7139.9	7120.9	7190.7	7428.6	7764.8	7945.6
24°	7558.6	7419.1	7203.4	7079.6	7073.3	7136.8	7352.5	7660.1	7825.1
25°	7428.6	7304.8	7105.1	7003.5	7009.9	7063.8	7260.4	7542.7	7695.1
26°	7273.1	7159.0	6990.8	6911.6	6921.1	6975.0	7155.7	7406.4	7552.2
27°	7098.7	6994.0	6857.7	6800.5	6825.9	6873.5	7028.9	7257.3	7374.7
28°	6879.9	6797.3	6699.0	6673.7	6705.4	6759.3	6889.4	7076.5	7181.2
29°	6626.0	6581.7	6505.5	6518.2	6562.6	6607.0	6714.8	6851.3	6933.8
30°	6353.3	6334.3	6289.9	6340.6	6391.3	6429.4	6502.4	6594.3	6657.8
31°	6074.2	6052.0	6058.3	6140.8	6216.9	6242.2	6283.5	6327.9	6375.5
32°	5760.2	5753.8	5779.1	5899.8	5998.1	6010.7	6013.9	6026.5	6052.0
33°	5439.8	5430.3	5481.1	5630.2	5741.1	5750.7	5725.2	5712.5	5731.6
34°	5106.8	5106.8	5173.3	5328.8	5458.9	5468.3	5417.6	5411.2	5392.1
35°	4786.4	4776.8	4852.9	4998.9	5144.7	5148.0	5090.8	5056.0	5052.8
37.5°	3993.4	3977.6	4002.9	4079.0	4186.8	4244.0	4237.6	4225.0	4215.4
40°	3270.2	3232.2	3181.4	3149.7	3181.4	3298.8	3400.2	3447.9	3457.3
42.5°	2588.3	2534.4	2426.5	2337.6	2350.4	2458.3	2613.6	2721.5	2775.4
45°	1928.5	1874.5	1785.8	1719.2	1719.2	1795.3	1925.3	2036.3	2096.6
47.5°	1376.6	1341.7	1291.0	1262.4	1281.4	1313.1	1386.1	1468.6	1494.0
50°	948.4	938.8	910.4	910.4	929.3	954.8	967.4	1008.7	1018.2
52.5°	663.0	647.0	650.2	653.4	669.2	672.5	691.4	681.9	697.8
55°	434.5	434.5	434.5	444.0	450.4	450.4	440.9	434.5	434.5
57.5°	276.0	269.6	272.7	279.1	279.1	269.6	253.8	250.5	234.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	164.9	164.9	168.2	168.2	164.9	155.4	139.6	126.9	120.5
62.5°	85.6	88.8	88.8	104.7	88.8	79.2	73.0	57.1	53.9
65°	28.6	34.9	34.9	34.9	38.1	34.9	34.9	31.7	31.7
67.5°	19.1	22.2	22.2	25.3	25.3	25.3	25.3	31.7	22.2
70°	15.8	15.8	19.1	22.2	22.2	25.3	19.1	15.8	25.3
72.5°	9.5	12.7	9.5	15.8	12.7	12.7	12.7	12.7	12.7
75°	0.0	6.4	3.1	0.0	9.5	6.4	3.1	6.4	0.0
77.5°	3.1	3.1	3.1	3.1	6.4	6.4	6.4	6.4	3.1
80°	3.1	3.1	6.4	3.1	3.1	6.4	0.0	0.0	12.7
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1
85°	0.0	3.1	3.1	3.1	3.1	3.1	6.4	6.4	0.0
87.5°	0.0	3.1	0.0	3.1	0.0	0.0	0.0	6.4	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)