

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: P#

Luminaire Tested: **LD4C65D010 EX4C659050 4LBSQLI**

Issue Date: 2/9/2022

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209151)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/9/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C65D010 EX4C659050 4LBSQLI  
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS  
AND 4LBSQ TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

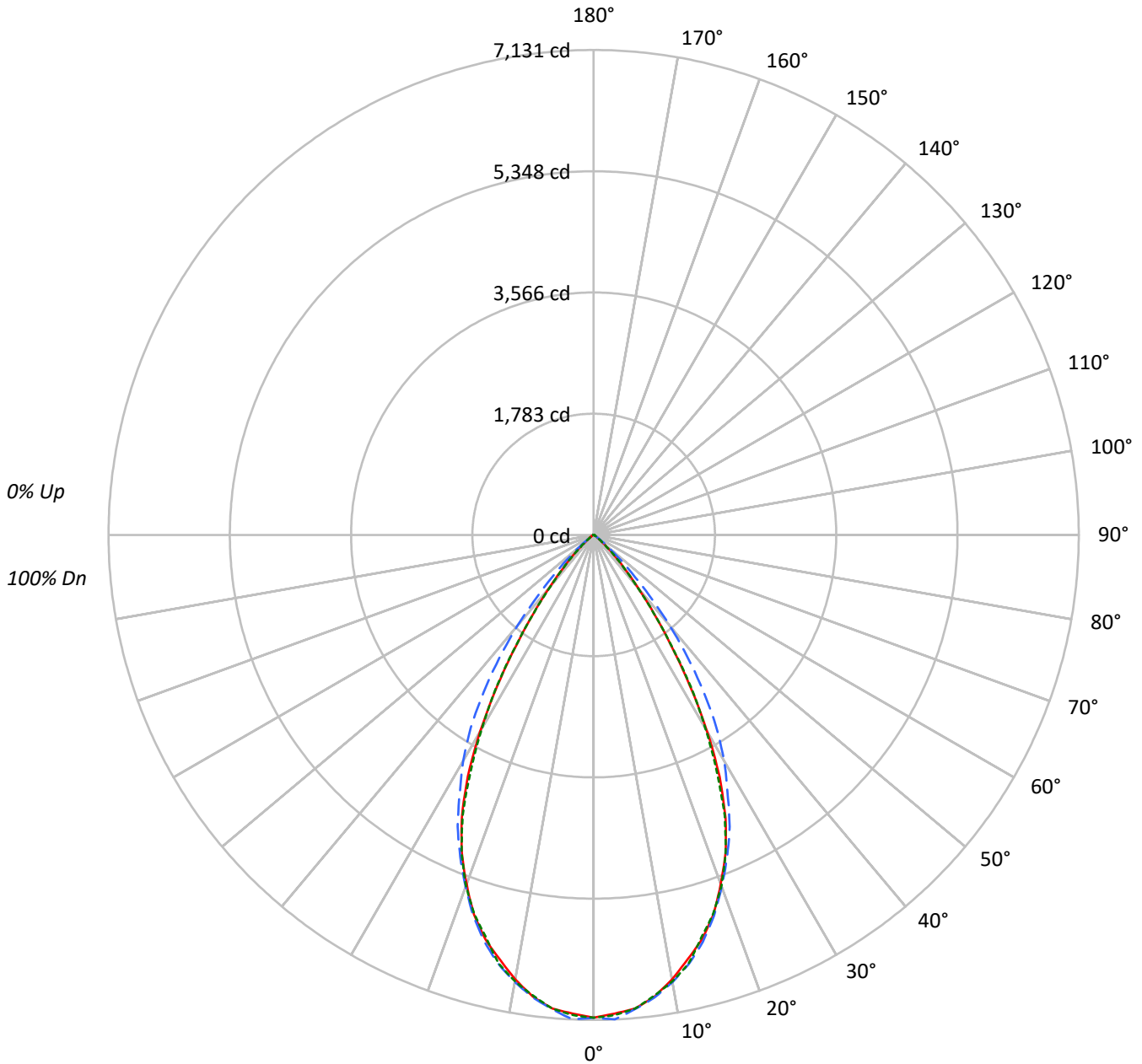
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6554.0 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 72.4  
Input Voltage (V):  
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

TEST NUMBER: P#  
CATALOG NUMBER: LD4C65D010 EX4C659050 4LBSQLI

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C65D010 EX4C659050 4LBSQLI

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

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

	0°	45°	90°
0°	684975	684975	684975
5°	677111	677983	677111
10°	650031	654009	653127
15°	614530	619035	611363
20°	560835	564994	563608
25°	488338	503701	484964
30°	371349	427124	365834
35°	233745	332042	235877
40°	126108	219279	123841
45°	59699	108319	59072
50°	22351	40620	22351
55°	10615	12903	9875
60°	6966	6117	6966
65°	4110	4110	4110
70°	2539	3837	2539
75°	1715	1715	1715
80°	2556	2556	2556
85°	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: LD4C65D010 EX4C659050 4LBSQLI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	658.2	10.0
10°-20°	1725.0	26.3
20°-30°	2107.2	32.2
30°-40°	1473.8	22.5
40°-50°	483.0	7.4
50°-60°	76.8	1.2
60°-70°	21.0	0.3
70°-80°	7.0	0.1
80°-90°	2.0	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°	4490.4	68.5
0°-40°	5964.3	91.0
0°-60°	6524.1	99.5
0°-90°	6554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6554.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7099	7099	7099	7099	7099	
5°	6991	6993	7000	6957	6991	656
15°	6152	6177	6197	6156	6120	1716
25°	4587	4657	4731	4645	4555	2060
35°	1984	2343	2819	2307	2002	1266
45°	438	539	794	532	433	367
55°	63	68	77	68	59	62
65°	18	23	18	23	18	20
75°	5	5	5	5	5	7
85°	0	0	0	0	0	2
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: LD4C65D010 EX4C659050 4LBSQLI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0
2.5°	7044.9	7094.6	7081.0	7112.6	7112.6	7076.5	7085.6	7099.0	7117.0	7130.7	7022.3
5°	6990.8	7035.9	6995.2	7040.3	7013.2	6972.7	7040.3	7004.2	7026.9	6999.8	7017.8
7.5°	6846.5	6918.6	6837.5	6891.6	6873.5	6850.9	6878.0	6868.9	6882.6	6859.9	6810.4
10°	6634.5	6693.2	6639.1	6715.6	6679.6	6657.1	6679.6	6702.2	6697.6	6675.1	6702.2
12.5°	6391.0	6458.5	6431.5	6476.5	6436.1	6436.1	6490.2	6476.5	6481.1	6463.1	6494.6
15°	6151.9	6201.6	6160.9	6219.6	6201.6	6151.9	6174.3	6174.3	6210.6	6197.0	6160.9
17.5°	5854.3	5894.8	5849.7	5863.3	5845.2	5836.2	5930.8	5867.7	5903.8	5876.7	5881.3
20°	5461.9	5479.9	5466.3	5502.4	5479.9	5507.0	5497.9	5488.9	5488.9	5502.4	5470.9
22.5°	5064.9	5064.9	5078.5	5087.5	5105.6	5078.5	5132.6	5087.5	5091.9	5123.6	5114.6
25°	4586.9	4573.3	4604.9	4650.0	4668.1	4645.4	4717.6	4681.5	4708.6	4731.2	4681.5
27.5°	4005.1	4005.1	4036.6	4113.3	4126.8	4153.8	4253.0	4253.0	4289.1	4257.6	4293.7
30°	3333.0	3382.7	3423.2	3522.4	3554.0	3612.7	3716.3	3766.0	3847.2	3833.6	3815.5
32.5°	2643.0	2710.7	2715.1	2818.9	2904.5	3003.7	3143.6	3260.8	3319.5	3360.0	3314.9
35°	1984.4	2025.1	2061.2	2133.3	2277.6	2408.5	2534.7	2688.1	2791.9	2818.9	2778.2
37.5°	1452.3	1461.4	1497.4	1565.0	1673.2	1799.6	1953.0	2119.7	2228.1	2268.6	2223.5
40°	1001.2	1010.3	1028.3	1087.0	1177.2	1267.4	1389.2	1560.6	1659.8	1740.9	1682.2
42.5°	672.0	681.0	699.0	744.1	793.8	879.4	974.2	1082.4	1177.2	1213.3	1181.6
45°	437.5	437.5	446.5	478.2	505.2	572.8	640.5	708.0	771.2	793.8	771.2
47.5°	257.1	261.5	270.6	293.2	324.7	351.7	401.4	446.5	464.5	482.6	473.6
50°	148.9	148.9	162.3	175.9	198.4	216.4	234.5	252.5	261.5	270.6	261.5
52.5°	81.2	85.8	90.2	94.8	103.8	121.8	135.3	135.3	139.9	144.3	139.9
55°	63.1	63.1	63.1	63.1	67.7	67.7	67.7	72.1	72.1	76.7	72.1
57.5°	45.1	45.1	45.1	49.7	49.7	49.7	45.1	45.1	45.1	45.1	45.1
60°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	31.7	31.7	31.7	31.7
62.5°	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
65°	18.0	18.0	22.6	22.6	22.6	22.6	22.6	18.0	18.0	18.0	18.0
67.5°	13.6	13.6	13.6	13.6	18.0	18.0	13.6	13.6	13.6	13.6	13.6
70°	9.0	9.0	9.0	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
72.5°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
75°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
80°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	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	0.0	0.0
87.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: LD4C65D010 EX4C659050 4LBSQLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0	7099.0
2.5°	7099.0	7022.3	7031.3	7071.9	7049.3	7071.9	7067.5	7067.5
5°	7022.3	6999.8	6963.7	6950.1	6977.2	7035.9	7026.9	6990.8
7.5°	6878.0	6819.4	6859.9	6878.0	6855.5	6891.6	6909.6	6832.9
10°	6706.6	6684.1	6675.1	6684.1	6675.1	6711.2	6666.1	6666.1
12.5°	6463.1	6427.0	6427.0	6481.1	6449.5	6422.4	6458.5	6454.1
15°	6219.6	6147.3	6147.3	6165.3	6178.9	6160.9	6165.3	6120.2
17.5°	5858.7	5836.2	5804.6	5854.3	5867.7	5849.7	5863.3	5840.7
20°	5520.4	5520.4	5461.9	5484.3	5502.4	5516.0	5525.0	5488.9
22.5°	5087.5	5096.5	5055.9	5101.0	5114.6	5069.5	5078.5	5069.5
25°	4690.5	4686.1	4654.4	4636.4	4645.4	4627.4	4623.0	4555.2
27.5°	4253.0	4207.9	4140.4	4158.4	4081.7	4018.6	4018.6	3914.8
30°	3779.5	3702.9	3612.7	3522.4	3454.8	3382.7	3342.0	3283.5
32.5°	3224.7	3121.1	3008.3	2886.5	2809.9	2701.7	2643.0	2674.6
35°	2674.6	2521.1	2367.8	2246.1	2128.7	2065.6	1993.5	2002.5
37.5°	2142.3	1925.9	1790.6	1659.8	1560.6	1479.4	1447.7	1438.7
40°	1565.0	1393.6	1258.4	1163.6	1096.0	1032.9	996.8	983.2
42.5°	1082.4	960.7	852.3	775.8	730.7	690.0	672.0	667.5
45°	703.6	631.5	559.3	505.2	469.1	442.1	437.5	432.9
47.5°	442.1	405.8	360.7	320.2	288.6	270.6	257.1	257.1
50°	252.5	239.1	216.4	194.0	175.9	166.9	153.3	148.9
52.5°	135.3	135.3	126.3	108.2	94.8	85.8	85.8	81.2
55°	72.1	72.1	67.7	67.7	63.1	63.1	63.1	58.7
57.5°	45.1	45.1	49.7	49.7	45.1	45.1	45.1	45.1
60°	31.7	36.1	36.1	36.1	36.1	36.1	36.1	36.1
62.5°	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
65°	18.0	22.6	22.6	22.6	22.6	18.0	18.0	18.0
67.5°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
70°	13.6	13.6	13.6	13.6	13.6	9.0	9.0	9.0
72.5°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
75°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
80°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
82.5°	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
87.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°









(END OF REPORT)