

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: **LD4C15D010 EX4C159027 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: LD4C15D010 EX4C159027 4LBSQLI
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

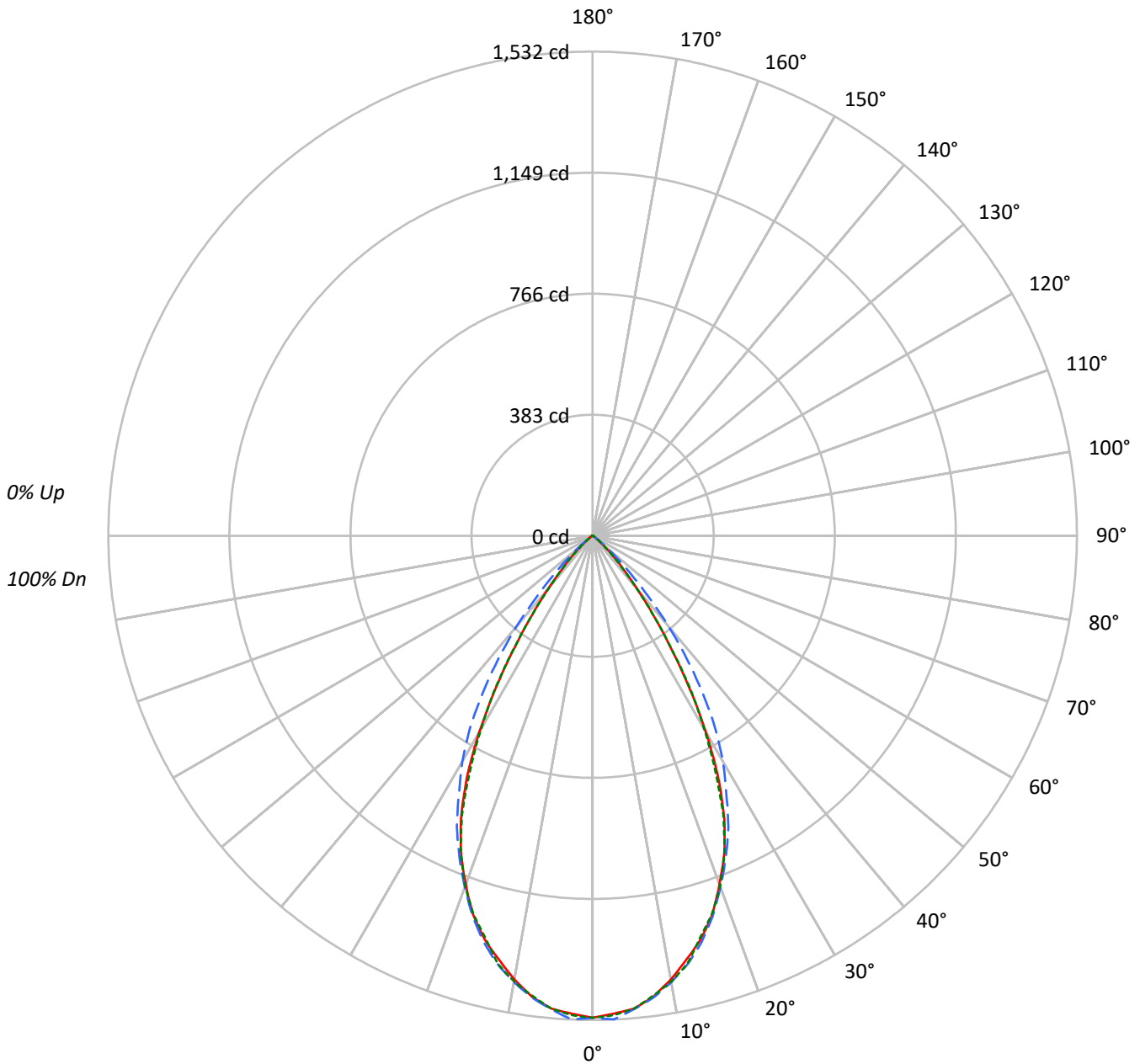
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1408.0 lumens
Efficiency: N/A
Efficacy: 89.1 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): 15.8
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

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Luminous Intensity Polar Plot





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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°	147155	147155	147155
5°	145461	145654	145461
10°	139647	140500	140313
15°	132018	132987	131339
20°	120486	121380	121082
25°	104909	108210	104185
30°	79774	91762	78593
35°	50214	71334	50674
40°	27093	47108	26602
45°	12827	23266	12690
50°	4804	8721	4804
55°	2288	2776	2120
60°	1486	1312	1486
65°	890	890	890
70°	536	818	536
75°	373	373	373
80°	556	556	556
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.4	10.0
10°-20°	370.6	26.3
20°-30°	452.7	32.2
30°-40°	316.6	22.5
40°-50°	103.8	7.4
50°-60°	16.5	1.2
60°-70°	4.5	0.3
70°-80°	1.5	0.1
80°-90°	0.4	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°	964.7	68.5
0°-40°	1281.3	91.0
0°-60°	1401.6	99.5
0°-90°	1408.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1408.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1525	1525	1525	1525	1525	
5°	1502	1502	1504	1495	1502	141
15°	1322	1327	1331	1323	1315	369
25°	985	1000	1016	998	979	443
35°	426	503	606	496	430	272
45°	94	116	170	114	93	79
55°	14	14	16	14	13	13
65°	4	5	4	5	4	4
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1
2.5°	1513.5	1524.1	1521.2	1528.0	1528.0	1520.3	1522.2	1525.1	1529.0	1531.9	1508.6
5°	1501.8	1511.5	1502.8	1512.5	1506.7	1498.0	1512.5	1504.7	1509.6	1503.8	1507.6
7.5°	1470.8	1486.3	1468.9	1480.5	1476.6	1471.8	1477.6	1475.7	1478.6	1473.7	1463.1
10°	1425.3	1437.9	1426.3	1442.7	1435.0	1430.1	1435.0	1439.8	1438.8	1434.0	1439.8
12.5°	1373.0	1387.5	1381.7	1391.4	1382.7	1382.7	1394.3	1391.4	1392.3	1388.5	1395.2
15°	1321.6	1332.3	1323.5	1336.2	1332.3	1321.6	1326.4	1326.4	1334.2	1331.3	1323.5
17.5°	1257.7	1266.4	1256.7	1259.6	1255.7	1253.8	1274.1	1260.6	1268.3	1262.5	1263.5
20°	1173.4	1177.3	1174.3	1182.1	1177.3	1183.1	1181.1	1179.2	1179.2	1182.1	1175.3
22.5°	1088.1	1088.1	1091.0	1093.0	1096.8	1091.0	1102.6	1093.0	1093.9	1100.7	1098.8
25°	985.4	982.5	989.3	999.0	1002.8	998.0	1013.5	1005.7	1011.5	1016.4	1005.7
27.5°	860.4	860.4	867.2	883.7	886.6	892.4	913.7	913.7	921.4	914.7	922.4
30°	716.0	726.7	735.4	756.7	763.5	776.1	798.4	809.1	826.5	823.6	819.7
32.5°	567.8	582.3	583.3	605.6	624.0	645.3	675.3	700.5	713.1	721.8	712.1
35°	426.3	435.1	442.8	458.3	489.3	517.4	544.5	577.5	599.8	605.6	596.9
37.5°	312.0	313.9	321.7	336.2	359.5	386.6	419.6	455.4	478.7	487.4	477.7
40°	215.1	217.0	220.9	233.5	252.9	272.3	298.4	335.3	356.6	374.0	361.4
42.5°	144.4	146.3	150.2	159.9	170.5	188.9	209.3	232.5	252.9	260.6	253.8
45°	94.0	94.0	95.9	102.7	108.5	123.0	137.6	152.1	165.7	170.5	165.7
47.5°	55.2	56.2	58.1	63.0	69.7	75.6	86.2	95.9	99.8	103.7	101.7
50°	32.0	32.0	34.9	37.8	42.6	46.5	50.4	54.2	56.2	58.1	56.2
52.5°	17.4	18.4	19.4	20.4	22.3	26.2	29.1	29.1	30.0	31.0	30.0
55°	13.6	13.6	13.6	13.6	14.5	14.5	14.5	15.5	15.5	16.5	15.5
57.5°	9.7	9.7	9.7	10.7	10.7	10.7	9.7	9.7	9.7	9.7	9.7
60°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.8	6.8	6.8	6.8
62.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
65°	3.9	3.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9	3.9
67.5°	2.9	2.9	2.9	2.9	3.9	3.9	2.9	2.9	2.9	2.9	2.9
70°	1.9	1.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1
2.5°	1525.1	1508.6	1510.5	1519.3	1514.4	1519.3	1518.3	1518.3
5°	1508.6	1503.8	1496.0	1493.1	1498.9	1511.5	1509.6	1501.8
7.5°	1477.6	1465.0	1473.7	1477.6	1472.8	1480.5	1484.4	1467.9
10°	1440.8	1436.0	1434.0	1436.0	1434.0	1441.8	1432.1	1432.1
12.5°	1388.5	1380.7	1380.7	1392.3	1385.5	1379.7	1387.5	1386.5
15°	1336.2	1320.6	1320.6	1324.5	1327.4	1323.5	1324.5	1314.8
17.5°	1258.6	1253.8	1247.0	1257.7	1260.6	1256.7	1259.6	1254.8
20°	1186.0	1186.0	1173.4	1178.2	1182.1	1185.0	1186.9	1179.2
22.5°	1093.0	1094.9	1086.2	1095.8	1098.8	1089.1	1091.0	1089.1
25°	1007.7	1006.7	999.9	996.0	998.0	994.1	993.2	978.6
27.5°	913.7	904.0	889.5	893.4	876.9	863.3	863.3	841.0
30°	811.9	795.5	776.1	756.7	742.2	726.7	718.0	705.4
32.5°	692.8	670.5	646.3	620.1	603.7	580.4	567.8	574.6
35°	574.6	541.6	508.7	482.5	457.3	443.8	428.3	430.2
37.5°	460.2	413.7	384.7	356.6	335.3	317.8	311.0	309.1
40°	336.2	299.4	270.3	250.0	235.5	221.9	214.1	211.2
42.5°	232.5	206.4	183.1	166.7	157.0	148.2	144.4	143.4
45°	151.2	135.7	120.2	108.5	100.8	95.0	94.0	93.0
47.5°	95.0	87.2	77.5	68.8	62.0	58.1	55.2	55.2
50°	54.2	51.4	46.5	41.7	37.8	35.9	32.9	32.0
52.5°	29.1	29.1	27.1	23.2	20.4	18.4	18.4	17.4
55°	15.5	15.5	14.5	14.5	13.6	13.6	13.6	12.6
57.5°	9.7	9.7	10.7	10.7	9.7	9.7	9.7	9.7
60°	6.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7
62.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
65°	3.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9
67.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
70°	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.9
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)