

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: **LD4C35D010 EX4C359027 4LBCSSQMMS**

Issue Date: 5/25/2022



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209253)
Test Lab: INNOVATION CENTER
Issue Date: 5/25/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C35D010 EX4C359027 4LBCSSQMMS
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Summary

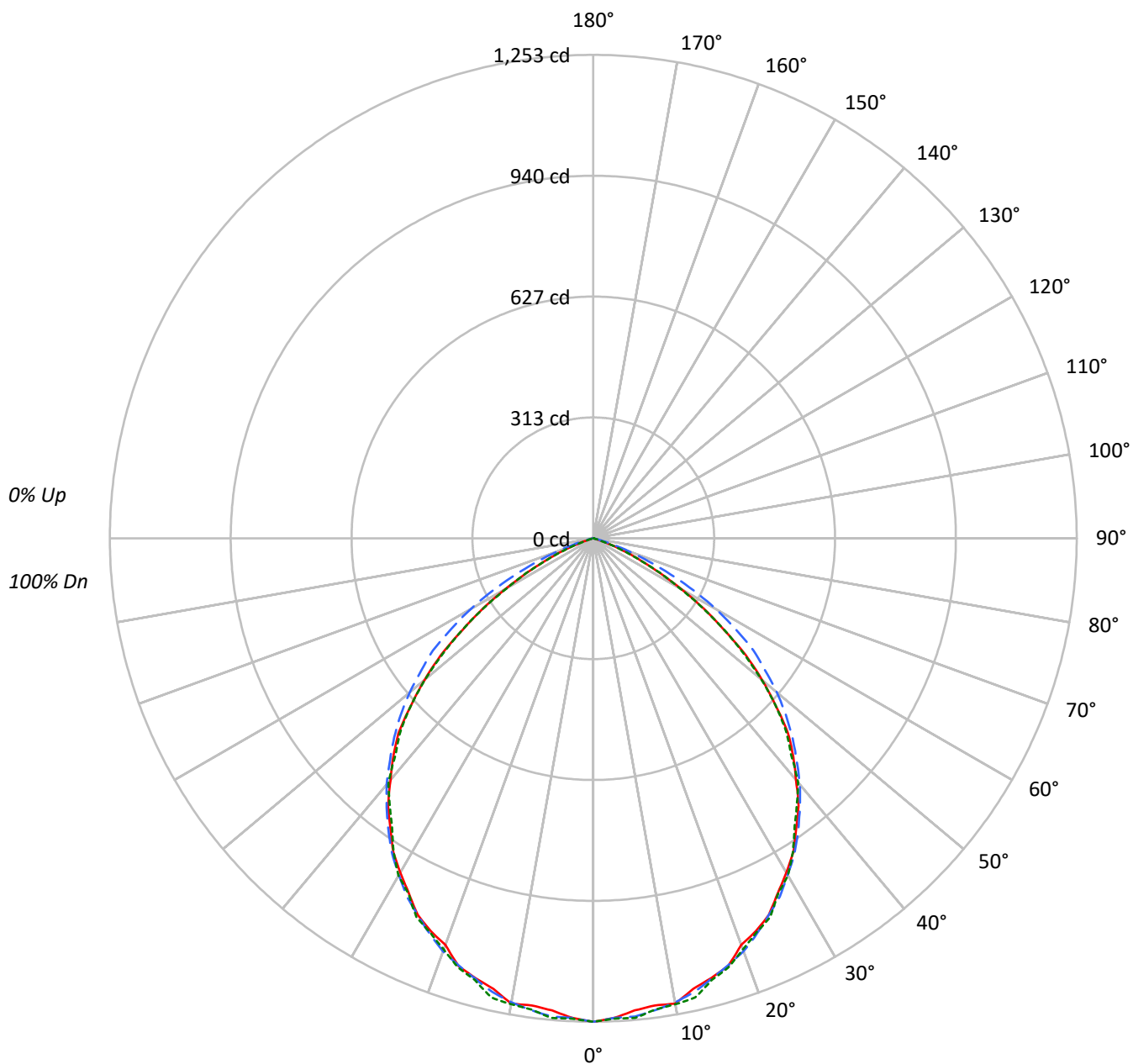
Lumens per Lamp: N/A
Luminaire Lumens: 2677.0 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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: LD4C35D010 EX4C359027 4LBCSSQMMS

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C35D010 EX4C359027 4LBCSSQMMMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	108	104	101	109	105	102	100		101	99	96			97	95	94			94
2	103	96	91	86	100	94	89	85		91	87	83			88	84	81			85
3	95	86	79	74	93	85	78	73		82	76	72			79	74	71			77
4	88	77	70	64	86	76	69	63		74	67	63			71	66	62			69
5	81	70	62	56	79	69	61	56		67	60	55			65	59	54			63
6	75	63	55	49	73	62	55	49		61	54	49			59	53	48			57
7	70	58	50	44	68	57	49	44		55	49	44			54	48	43			53
8	65	53	45	40	64	52	45	39		51	44	39			50	44	39			49
9	61	49	41	36	60	48	41	36		47	40	36			46	40	35			45
10	57	45	38	33	56	44	37	33		44	37	32			43	37	32			42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	120920	120920	120920
5°	118970	120520	120859
10°	119993	119650	120169
15°	117893	118063	118423
20°	115147	116975	116430
25°	114651	114651	115407
30°	111460	112251	112452
35°	107979	109028	107143
40°	102920	104922	104028
45°	97402	99586	96433
50°	85773	93263	85248
55°	69476	85340	69779
60°	50830	70765	49808
65°	30891	50388	30069
70°	12046	27139	11567
75°	1342	7307	1342
80°	1000	1000	1000
85°	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: LD4C35D010 EX4C359027 4LBCSSQMMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	4.4
10°-20°	334.7	12.5
20°-30°	496.7	18.6
30°-40°	575.5	21.5
40°-50°	551.8	20.6
50°-60°	405.7	15.2
60°-70°	175.2	6.5
70°-80°	18.9	0.7
80°-90°	0.2	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°	949.7	35.5
0°-40°	1525.2	57.0
0°-60°	2482.6	92.7
0°-90°	2677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2677.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1253	1253	1253	1253	1253	
5°	1228	1241	1244	1246	1248	117
15°	1180	1187	1182	1184	1186	333
25°	1077	1075	1077	1079	1084	493
35°	917	922	926	924	910	573
45°	714	716	730	719	707	543
55°	413	456	507	454	415	372
65°	135	169	221	167	132	139
75°	4	5	20	4	4	11
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: LD4C35D010 EX4C359027 4LBCSSQMMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2
2.5°	1244.3	1258.5	1260.3	1251.4	1247.8	1242.5	1254.9	1246.1	1249.6	1246.1	1244.3
5°	1228.3	1244.3	1246.1	1246.1	1242.5	1240.7	1246.1	1244.3	1242.5	1239.0	1244.3
7.5°	1221.2	1230.0	1239.0	1228.3	1233.6	1231.8	1244.3	1239.0	1237.1	1237.1	1233.6
10°	1224.7	1222.9	1230.0	1219.3	1222.9	1219.3	1230.0	1230.0	1226.5	1222.9	1221.2
12.5°	1196.2	1210.4	1210.4	1208.7	1205.1	1199.7	1210.4	1217.6	1206.9	1206.9	1205.1
15°	1180.2	1183.8	1185.5	1185.5	1183.8	1187.3	1192.6	1185.5	1187.3	1178.4	1181.9
17.5°	1162.4	1155.3	1160.6	1157.0	1158.8	1162.4	1169.5	1169.5	1158.8	1157.0	1160.6
20°	1121.4	1142.8	1144.6	1133.9	1135.7	1135.7	1148.2	1137.5	1144.6	1135.7	1139.2
22.5°	1101.8	1116.1	1117.9	1103.6	1112.5	1101.8	1114.3	1098.3	1116.1	1103.6	1109.0
25°	1076.9	1075.2	1080.5	1073.4	1075.2	1075.2	1084.0	1076.9	1082.3	1075.2	1076.9
27.5°	1036.0	1050.3	1048.5	1041.3	1044.9	1043.1	1060.9	1041.3	1052.0	1043.1	1046.7
30°	1000.4	1012.9	1009.3	1002.2	1002.2	996.8	1016.4	1011.0	1009.3	1009.3	1007.5
32.5°	964.8	966.6	963.0	964.8	966.6	959.5	975.5	968.3	966.6	968.3	970.2
35°	916.7	916.7	920.3	915.0	922.1	922.1	936.3	927.4	925.6	920.3	925.6
37.5°	874.0	868.7	870.4	870.4	874.0	877.6	884.7	881.1	881.1	875.8	879.4
40°	817.1	813.5	818.8	818.8	824.2	824.2	831.3	827.7	833.0	833.0	833.0
42.5°	767.2	767.2	763.7	769.0	770.8	769.0	781.5	779.7	781.5	777.9	779.7
45°	713.8	713.8	710.2	708.5	717.3	715.6	729.8	724.5	731.6	728.0	729.8
47.5°	640.8	649.7	644.4	649.7	660.4	662.2	671.1	667.5	674.6	669.3	676.5
50°	571.4	571.4	576.7	583.9	594.5	596.3	607.0	614.1	617.7	619.4	621.3
52.5°	498.4	496.6	502.0	510.9	519.8	526.9	537.6	548.3	555.4	566.1	560.7
55°	413.0	416.5	421.9	432.6	446.8	455.7	464.6	478.8	491.3	496.6	507.3
57.5°	340.0	336.4	340.0	354.2	370.3	377.4	389.9	404.1	421.9	432.6	436.1
60°	263.4	265.2	268.8	281.3	293.7	304.4	309.8	332.9	348.9	359.6	366.7
62.5°	194.1	197.6	201.2	211.9	224.3	233.2	242.1	261.7	275.9	286.6	293.7
65°	135.3	137.0	142.4	147.7	160.2	169.1	176.2	192.2	206.5	215.4	220.7
67.5°	83.7	85.4	89.0	96.2	105.0	112.1	119.3	129.9	142.4	151.3	153.1
70°	42.7	44.5	46.3	51.6	58.8	62.3	67.6	76.5	85.4	92.5	96.2
72.5°	14.2	14.2	16.0	19.6	23.2	26.7	28.5	37.4	44.5	48.1	49.8
75°	3.6	3.6	3.6	3.6	3.6	5.4	5.4	10.7	14.2	17.8	19.6
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	3.6
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: LD4C35D010 EX4C359027 4LBCSSQMMS

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2	1253.2
2.5°	1253.2	1249.6	1247.8	1249.6	1249.6	1247.8	1253.2	1260.3	1269.2	1246.1
5°	1251.4	1247.8	1251.4	1240.7	1246.1	1242.5	1249.6	1247.8	1254.9	1247.8
7.5°	1246.1	1239.0	1240.7	1235.4	1242.5	1233.6	1239.0	1249.6	1242.5	1231.8
10°	1228.3	1224.7	1237.1	1219.3	1215.8	1222.9	1237.1	1226.5	1222.9	1226.5
12.5°	1210.4	1210.4	1215.8	1201.5	1203.3	1206.9	1214.0	1206.9	1210.4	1219.3
15°	1190.9	1187.3	1196.2	1185.5	1183.8	1180.2	1187.3	1187.3	1190.9	1185.5
17.5°	1167.7	1162.4	1162.4	1158.8	1157.0	1166.0	1169.5	1171.3	1173.1	1166.0
20°	1139.2	1137.5	1142.8	1137.5	1139.2	1141.0	1141.0	1137.5	1153.5	1133.9
22.5°	1109.0	1114.3	1107.2	1103.6	1107.2	1110.8	1110.8	1112.5	1109.0	1105.4
25°	1078.7	1082.3	1084.0	1073.4	1078.7	1073.4	1085.9	1087.6	1080.5	1084.0
27.5°	1052.0	1046.7	1044.9	1037.8	1041.3	1039.6	1041.3	1041.3	1052.0	1037.8
30°	1011.0	1005.7	1007.5	1002.2	1003.9	1002.2	1003.9	1003.9	1011.0	1009.3
32.5°	971.9	966.6	968.3	963.0	963.0	964.8	961.2	961.2	966.6	963.0
35°	934.5	922.1	923.8	922.1	923.8	916.7	916.7	915.0	918.5	909.6
37.5°	881.1	875.8	874.0	872.3	874.0	870.4	874.0	868.7	874.0	866.9
40°	833.0	829.5	831.3	820.6	820.6	822.4	818.8	817.1	818.8	825.9
42.5°	785.0	777.9	774.4	770.8	772.5	767.2	765.4	761.9	765.4	758.3
45°	728.0	728.0	726.3	717.3	719.2	719.2	712.0	704.9	706.7	706.7
47.5°	676.5	672.9	671.1	662.2	660.4	658.7	651.5	646.2	646.2	640.8
50°	619.4	615.9	610.6	601.6	598.1	587.4	582.1	575.0	567.9	567.9
52.5°	566.1	553.6	546.5	532.2	526.9	521.5	507.3	502.0	496.6	491.3
55°	502.0	491.3	477.1	461.0	453.9	445.0	430.8	420.1	413.0	414.8
57.5°	439.7	421.9	407.7	386.3	377.4	372.0	357.8	343.5	336.4	336.4
60°	363.1	348.9	331.1	311.5	304.4	295.5	277.7	268.8	263.4	258.1
62.5°	290.1	279.5	263.4	238.5	233.2	224.3	211.9	201.2	195.8	195.8
65°	217.2	206.5	192.2	174.5	167.3	160.2	149.5	138.9	133.5	131.7
67.5°	153.1	140.6	128.2	114.0	108.6	105.0	94.3	87.2	83.7	81.9
70°	92.5	85.4	76.5	65.9	60.5	56.9	49.8	44.5	42.7	41.0
72.5°	48.1	42.7	35.6	28.5	24.9	21.4	17.8	14.2	12.5	12.5
75°	17.8	14.2	8.9	5.4	3.6	3.6	3.6	3.6	3.6	3.6
77.5°	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	0.0	0.0	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	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	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)