

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: P857136

Luminaire Tested: **LD4C20D010 EU4209030 4LBMDSWMW**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P857136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2309-186-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C20D010 EU4209030 4LBMDSWMW
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

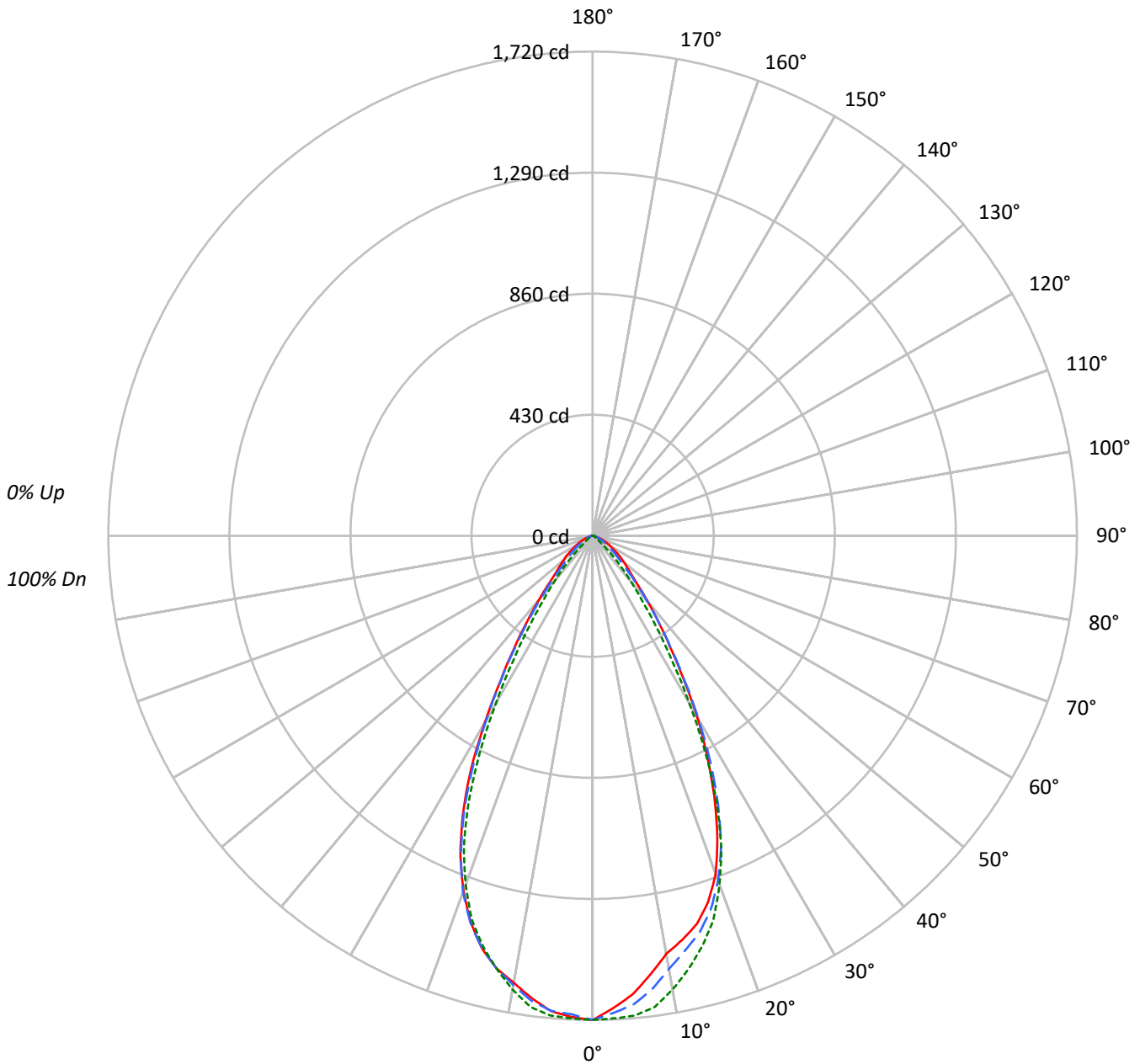
Lumens per Lamp: N/A
Luminaire Lumens: 1566.0 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
Input Voltage (V): NR
Input Current (A_{in}): 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	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	111	108	105	103	104	102	100	100	99	97	97	95	94	92				92				
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85				85				
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78				78				
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72				72				
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67				67				
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62				62				
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58				58				
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55				55				
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51				51				
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48				48				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	211333	211333	211333
5°	201657	210993	209032
10°	188084	204151	201170
15°	181623	191760	193108
20°	167070	172273	175398
25°	138468	140990	147835
30°	105344	97429	108352
35°	71329	58371	72124
40°	48577	33454	47086
45°	33688	16853	31847
50°	27427	6861	25649
55°	22190	4262	20198
60°	17617	3268	15996
65°	13895	2703	12355
70°	10489	2371	9555
75°	7547	1899	6930
80°	5660	1910	4669
85°	3806	1832	3806



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.2	10.1
10°-20°	415.6	26.5
20°-30°	476.8	30.4
30°-40°	289.6	18.5
40°-50°	124.1	7.9
50°-60°	59.5	3.8
60°-70°	29.0	1.8
70°-80°	10.7	0.7
80°-90°	2.5	0.2
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°	1050.5	67.1
0°-40°	1340.1	85.6
0°-60°	1523.8	97.3
0°-90°	1566.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1566.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1720	1720	1720	1720	1720	
5°	1635	1671	1711	1694	1695	152
15°	1428	1461	1508	1517	1518	398
25°	1022	1055	1040	1080	1091	463
35°	476	482	389	470	481	305
45°	194	173	97	155	183	158
55°	104	77	20	69	94	94
65°	48	32	9	29	42	49
75°	16	11	4	9	15	17
85°	3	3	1	1	3	4
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°	1720.2	1720.2	1720.2	1720.2	1720.2	1720.2	1720.2	1720.2	1720.2
2.5°	1679.0	1697.6	1696.3	1712.3	1716.2	1712.3	1701.6	1712.3	1710.9
5°	1635.2	1656.5	1671.1	1697.6	1710.9	1708.3	1693.7	1696.3	1695.0
7.5°	1571.5	1598.0	1623.3	1663.1	1688.3	1687.0	1665.8	1661.8	1656.5
10°	1507.7	1532.9	1562.2	1603.3	1636.5	1641.9	1620.6	1615.3	1612.6
12.5°	1470.5	1490.4	1510.3	1546.2	1575.4	1586.1	1574.1	1575.4	1574.1
15°	1428.0	1447.9	1461.2	1487.8	1507.7	1522.3	1517.0	1525.0	1518.3
17.5°	1364.2	1388.1	1393.5	1413.4	1428.0	1437.3	1442.6	1450.6	1439.9
20°	1277.9	1296.5	1303.1	1311.1	1317.7	1329.7	1345.6	1353.6	1341.6
22.5°	1157.0	1192.9	1191.5	1187.6	1194.2	1198.2	1223.4	1236.7	1227.4
25°	1021.5	1058.7	1054.7	1038.8	1040.1	1048.1	1080.0	1097.2	1090.6
27.5°	879.4	913.9	904.6	874.1	866.1	878.0	919.2	939.2	935.2
30°	742.6	765.1	750.5	696.1	686.8	701.4	754.5	774.4	763.8
32.5°	595.1	612.4	605.7	539.3	523.4	538.0	600.4	619.0	607.1
35°	475.6	491.5	482.2	403.8	389.2	405.2	470.2	491.5	480.9
37.5°	381.2	393.2	381.2	297.6	284.3	300.2	362.6	390.5	377.3
40°	302.9	312.2	296.2	219.2	208.6	216.5	275.0	302.9	293.6
42.5°	239.1	245.7	228.5	160.7	148.8	159.4	207.2	232.5	227.1
45°	193.9	193.9	172.7	111.6	97.0	107.6	155.4	182.0	183.3
47.5°	166.0	162.1	135.5	74.4	55.8	70.4	123.5	151.4	155.4
50°	143.5	138.1	111.6	54.5	35.9	50.5	102.3	130.2	134.2
52.5°	123.5	119.6	93.0	42.5	25.2	38.5	86.3	112.9	116.9
55°	103.6	101.0	77.0	33.2	19.9	29.2	69.1	91.7	94.3
57.5°	85.0	81.0	62.4	27.9	15.9	23.9	57.1	75.7	78.4
60°	71.7	67.7	50.5	22.6	13.3	18.6	46.5	62.4	65.1
62.5°	59.8	55.8	41.2	18.6	10.6	15.9	37.2	50.5	53.1
65°	47.8	45.2	31.9	14.6	9.3	12.0	29.2	39.9	42.5
67.5°	38.5	35.9	25.2	12.0	8.0	9.3	22.6	31.9	34.5
70°	29.2	26.6	18.6	9.3	6.6	8.0	17.3	23.9	26.6
72.5°	21.3	19.9	14.6	8.0	5.3	6.6	12.0	17.3	19.9
75°	15.9	14.6	10.6	5.3	4.0	5.3	9.3	13.3	14.6
77.5°	10.6	10.6	8.0	4.0	4.0	4.0	6.6	9.3	9.3
80°	8.0	6.6	5.3	2.7	2.7	2.7	4.0	6.6	6.6
82.5°	5.3	4.0	4.0	2.7	2.7	2.7	2.7	4.0	4.0
85°	2.7	2.7	2.7	1.3	1.3	1.3	1.3	2.7	2.7
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
90°	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)