

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: P857180

Luminaire Tested: **LD4C20D010 EU4209040 4LBMDSWMW**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P857180
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 EU4209040 4LBMDSWMW
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

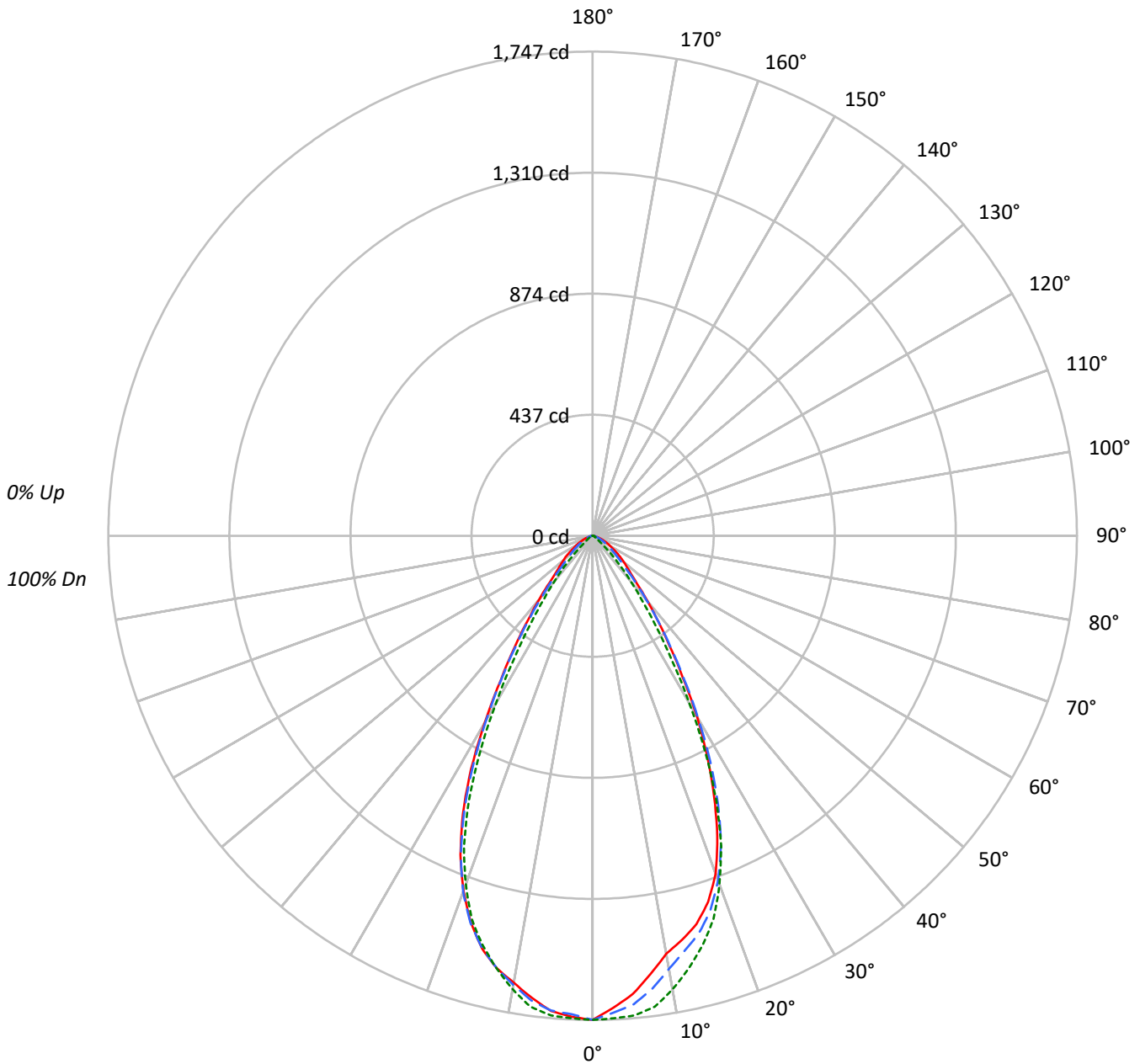
Lumens per Lamp: N/A
Luminaire Lumens: 1590.0 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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									
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	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92																			
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85																			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78																			
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72																			
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67																			
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62																			
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58																			
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55																			
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51																			
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	214576	214576	214576
5°	204753	214236	212238
10°	190965	207282	204251
15°	184409	194698	196072
20°	169632	174914	178091
25°	140596	143145	150099
30°	106947	98918	110012
35°	72409	59271	73218
40°	49315	33951	47807
45°	34210	17113	32333
50°	27847	6957	26031
55°	22533	4327	20519
60°	17887	3317	16241
65°	14128	2733	12558
70°	10668	2407	9698
75°	7690	1899	7025
80°	5731	1910	4740
85°	3806	1832	3806



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	10.1
10°-20°	421.9	26.5
20°-30°	484.1	30.4
30°-40°	294.1	18.5
40°-50°	126.0	7.9
50°-60°	60.5	3.8
60°-70°	29.4	1.8
70°-80°	10.9	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°	1066.6	67.1
0°-40°	1360.7	85.6
0°-60°	1547.2	97.3
0°-90°	1590.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1590.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1747	1747	1747	1747	1747	
5°	1660	1697	1737	1720	1721	154
15°	1450	1484	1531	1540	1542	404
25°	1037	1071	1056	1096	1107	470
35°	483	490	395	477	488	309
45°	197	175	98	158	186	160
55°	105	78	20	70	96	95
65°	49	32	9	30	43	49
75°	16	11	4	9	15	18
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°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6
2.5°	1704.8	1723.7	1722.3	1738.5	1742.5	1738.5	1727.7	1738.5	1737.2
5°	1660.3	1681.9	1696.7	1723.7	1737.2	1734.5	1719.6	1722.3	1721.0
7.5°	1595.5	1622.5	1648.1	1688.6	1714.2	1712.9	1691.3	1687.2	1681.9
10°	1530.8	1556.4	1586.1	1627.9	1661.6	1667.0	1645.4	1640.0	1637.3
12.5°	1493.0	1513.3	1533.5	1569.9	1599.6	1610.4	1598.2	1599.6	1598.2
15°	1449.9	1470.1	1483.6	1510.6	1530.8	1545.6	1540.2	1548.3	1541.6
17.5°	1385.1	1409.4	1414.8	1435.0	1449.9	1459.3	1464.7	1472.8	1462.0
20°	1297.5	1316.4	1323.1	1331.2	1337.9	1350.1	1366.3	1374.3	1362.2
22.5°	1174.7	1211.2	1209.8	1205.8	1212.5	1216.5	1242.2	1255.7	1246.2
25°	1037.2	1074.9	1070.9	1054.7	1056.0	1064.1	1096.5	1114.0	1107.3
27.5°	892.9	927.9	918.5	887.5	879.4	891.5	933.3	953.5	949.5
30°	753.9	776.9	762.0	706.7	697.3	712.1	766.1	786.3	775.5
32.5°	604.2	621.8	615.0	547.6	531.4	546.2	609.6	628.5	616.4
35°	482.8	499.0	489.6	410.0	395.2	411.4	477.4	499.0	488.2
37.5°	387.1	399.2	387.1	302.1	288.6	304.8	368.2	396.5	383.0
40°	307.5	316.9	300.8	222.5	211.7	219.8	279.2	307.5	298.1
42.5°	242.8	249.5	232.0	163.2	151.1	161.8	210.4	236.0	230.6
45°	196.9	196.9	175.3	113.3	98.5	109.2	157.8	184.8	186.1
47.5°	168.6	164.5	137.6	75.5	56.6	71.5	125.4	153.8	157.8
50°	145.7	140.3	113.3	55.3	36.4	51.3	103.9	132.2	136.2
52.5°	125.4	121.4	94.4	43.2	25.6	39.1	87.7	114.6	118.7
55°	105.2	102.5	78.2	33.7	20.2	29.7	70.1	93.1	95.8
57.5°	86.3	82.3	63.4	28.3	16.2	24.3	58.0	76.9	79.6
60°	72.8	68.8	51.3	22.9	13.5	18.9	47.2	63.4	66.1
62.5°	60.7	56.6	41.8	18.9	10.8	16.2	37.8	51.3	53.9
65°	48.6	45.9	32.4	14.8	9.4	12.1	29.7	40.5	43.2
67.5°	39.1	36.4	25.6	12.1	8.1	9.4	22.9	32.4	35.1
70°	29.7	27.0	18.9	9.4	6.7	8.1	17.5	24.3	27.0
72.5°	21.6	20.2	14.8	8.1	5.4	6.7	12.1	17.5	20.2
75°	16.2	14.8	10.8	5.4	4.0	5.4	9.4	13.5	14.8
77.5°	10.8	10.8	8.1	4.0	4.0	4.0	6.7	9.4	9.4
80°	8.1	6.7	5.4	2.7	2.7	2.7	4.0	6.7	6.7
82.5°	5.4	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)