

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: P857158

Luminaire Tested: **LD4C20D010 EU4209035 4LBMDSWMW**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P857158  
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 EU4209035 4LBMDSWMW  
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH MW FINISH  
Light Source: -  
Ballast/Driver: -

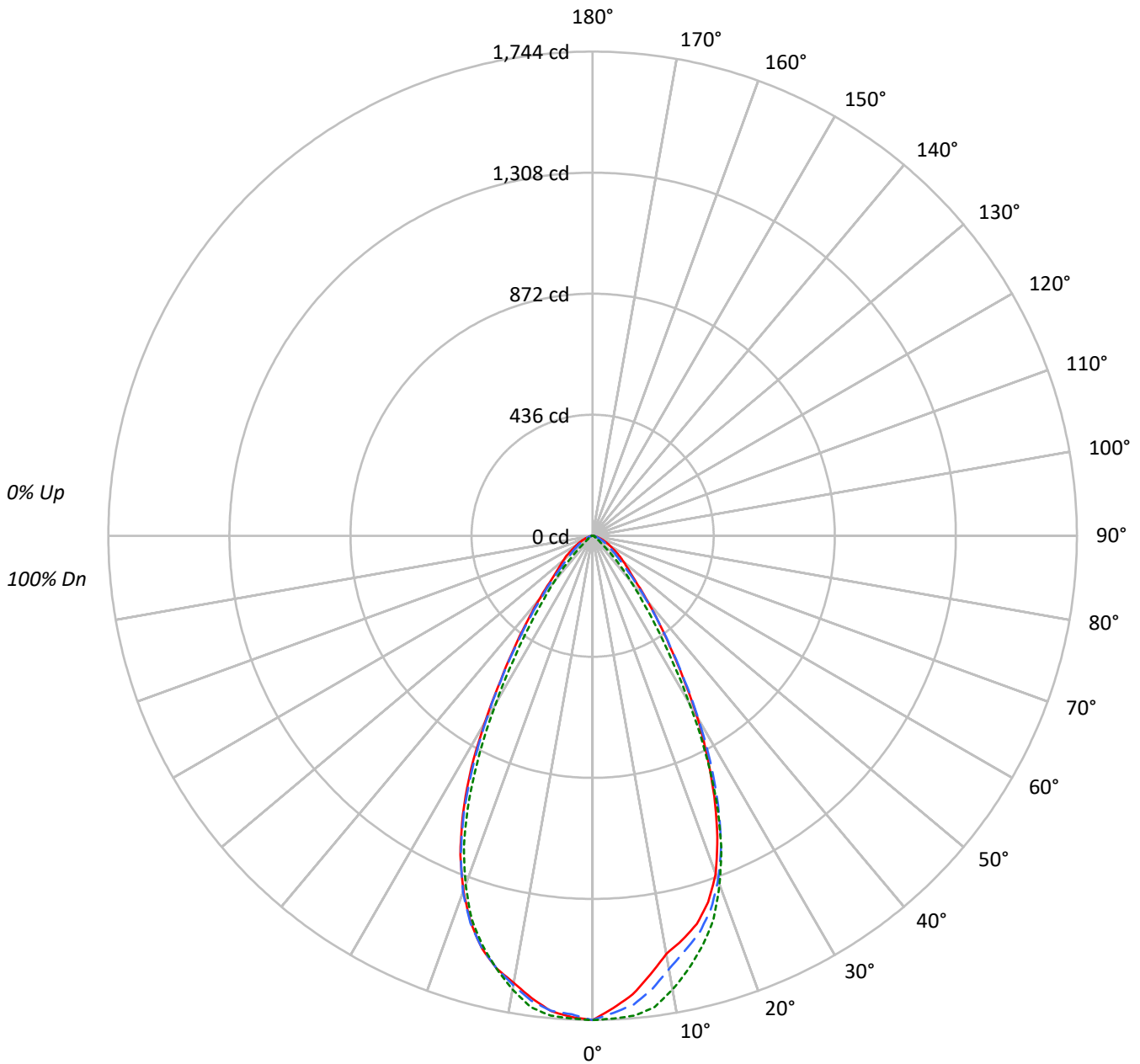
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1588.0 lumens  
Efficiency: N/A  
Efficacy: 72.8 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<sub>in</sub>): 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°	214306	214306	214306
5°	204494	213965	211967
10°	190728	207020	204002
15°	184167	194457	195818
20°	169410	174692	177869
25°	140420	142969	149909
30°	106820	98791	109870
35°	72319	59196	73128
40°	49251	33919	47743
45°	34175	17079	32298
50°	27809	6957	25993
55°	22511	4327	20476
60°	17863	3317	16217
65°	14099	2733	12529
70°	10632	2407	9662
75°	7690	1899	7025
80°	5731	1910	4740
85°	3806	1832	3806



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.4	10.1
10°-20°	421.4	26.5
20°-30°	483.5	30.4
30°-40°	293.7	18.5
40°-50°	125.9	7.9
50°-60°	60.4	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°	1065.3	67.1
0°-40°	1359.0	85.6
0°-60°	1545.2	97.3
0°-90°	1588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1588.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1744	1744	1744	1744	1744	
5°	1658	1695	1735	1718	1719	154
15°	1448	1482	1529	1538	1540	403
25°	1036	1070	1055	1095	1106	470
35°	482	489	395	477	488	309
45°	197	175	98	158	186	160
55°	105	78	20	70	96	95
65°	48	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°	1744.4	1744.4	1744.4	1744.4	1744.4	1744.4	1744.4	1744.4	1744.4
2.5°	1702.6	1721.5	1720.1	1736.3	1740.4	1736.3	1725.5	1736.3	1735.0
5°	1658.2	1679.7	1694.6	1721.5	1735.0	1732.3	1717.5	1720.1	1718.8
7.5°	1593.5	1620.5	1646.1	1686.5	1712.1	1710.7	1689.2	1685.1	1679.7
10°	1528.9	1554.5	1584.1	1625.9	1659.5	1664.9	1643.4	1638.0	1635.3
12.5°	1491.2	1511.4	1531.6	1567.9	1597.6	1608.3	1596.2	1597.6	1596.2
15°	1448.0	1468.3	1481.7	1508.7	1528.9	1543.7	1538.3	1546.4	1539.6
17.5°	1383.4	1407.6	1413.0	1433.2	1448.0	1457.5	1462.9	1470.9	1460.2
20°	1295.8	1314.7	1321.4	1329.5	1336.2	1348.4	1364.5	1372.6	1360.5
22.5°	1173.3	1209.6	1208.3	1204.2	1211.0	1215.0	1240.6	1254.1	1244.6
25°	1035.9	1073.6	1069.5	1053.4	1054.7	1062.8	1095.1	1112.6	1105.9
27.5°	891.7	926.8	917.3	886.3	878.3	890.4	932.1	952.3	948.3
30°	753.0	775.9	761.1	705.8	696.4	711.2	765.1	785.3	774.5
32.5°	603.5	621.0	614.2	546.9	530.7	545.5	608.9	627.7	615.6
35°	482.2	498.4	489.0	409.5	394.7	410.8	476.8	498.4	487.6
37.5°	386.6	398.7	386.6	301.7	288.3	304.4	367.7	396.0	382.6
40°	307.1	316.6	300.4	222.3	211.5	219.6	278.8	307.1	297.7
42.5°	242.5	249.2	231.7	163.0	150.9	161.6	210.1	235.7	230.3
45°	196.7	196.7	175.1	113.1	98.3	109.1	157.6	184.5	185.9
47.5°	168.4	164.3	137.4	75.4	56.6	71.4	125.3	153.6	157.6
50°	145.5	140.1	113.1	55.2	36.4	51.2	103.7	132.0	136.0
52.5°	125.3	121.2	94.3	43.1	25.6	39.1	87.6	114.5	118.5
55°	105.1	102.4	78.1	33.7	20.2	29.6	70.0	92.9	95.6
57.5°	86.2	82.2	63.3	28.3	16.2	24.2	57.9	76.8	79.5
60°	72.7	68.7	51.2	22.9	13.5	18.9	47.1	63.3	66.0
62.5°	60.6	56.6	41.8	18.9	10.8	16.2	37.7	51.2	53.9
65°	48.5	45.8	32.3	14.8	9.4	12.1	29.6	40.4	43.1
67.5°	39.1	36.4	25.6	12.1	8.1	9.4	22.9	32.3	35.0
70°	29.6	26.9	18.9	9.4	6.7	8.1	17.5	24.2	26.9
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)