

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: P857204

Luminaire Tested: **LD4C20D010 EU4209050 4LBMDSWWMH**

Issue Date: 4/12/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P857204  
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 EU4209050 4LBMDSWWMH  
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH WMH FINISH  
Light Source: -  
Ballast/Driver: -

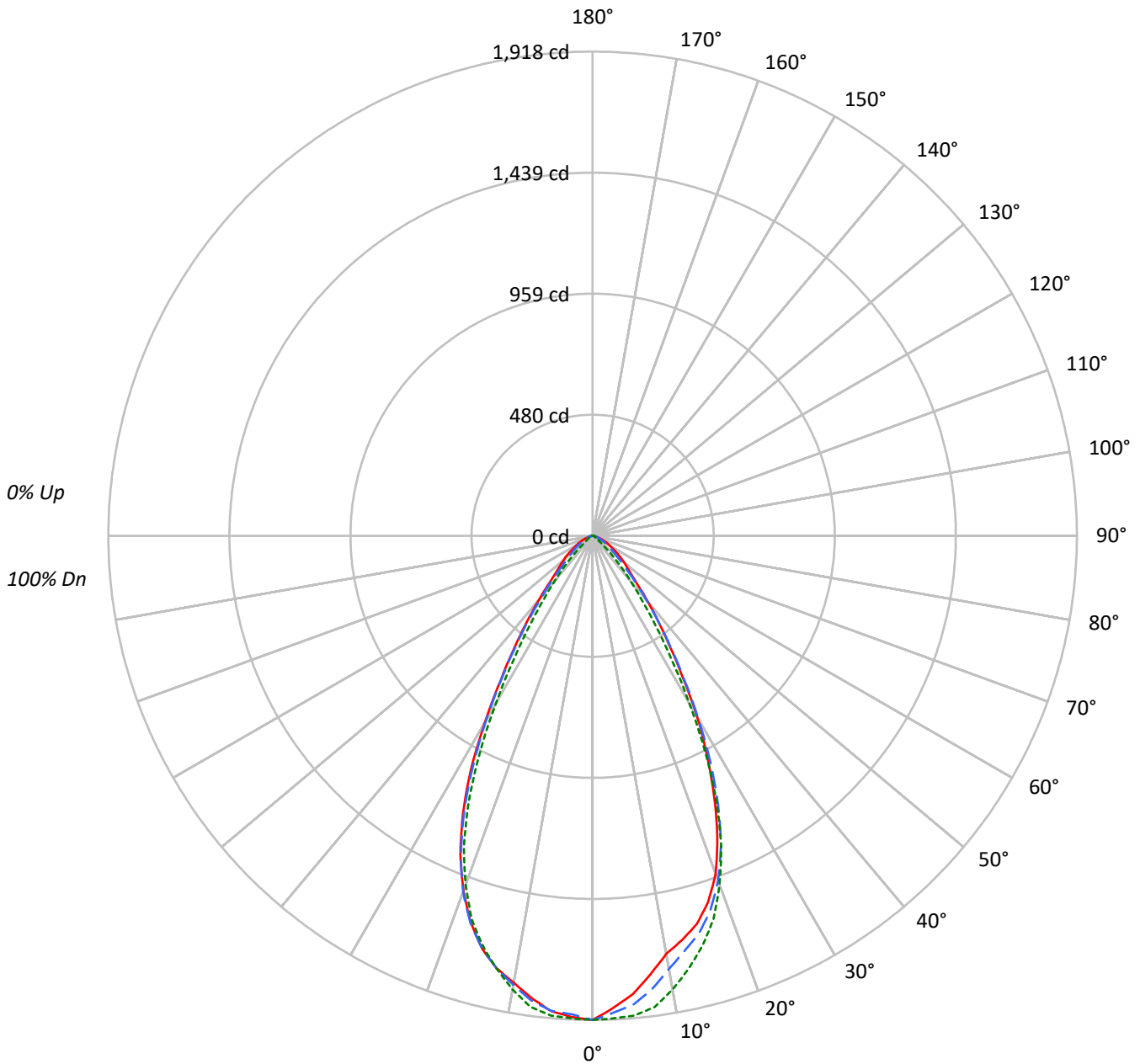
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1746.0 lumens  
Efficiency: N/A  
Efficacy: 80.1 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	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92	92	92	92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78	78	78	78
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55	55	55	55
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51	51	51	51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48	48	48	48

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	235633	235633	235633
5°	224842	235250	233055
10°	209703	227616	224298
15°	202495	213802	215303
20°	186275	192080	195571
25°	154382	157202	164820
30°	117445	108621	120807
35°	79517	65075	80402
40°	54158	37287	52490
45°	37563	18781	35513
50°	30580	7645	28592
55°	24739	4755	22533
60°	19657	3636	17838
65°	15494	3023	13779
70°	11710	2658	10632
75°	8449	2089	7737
80°	6297	2122	5235
85°	4229	2114	4229



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.3	10.1
10°-20°	463.3	26.5
20°-30°	531.6	30.4
30°-40°	322.9	18.5
40°-50°	138.4	7.9
50°-60°	66.4	3.8
60°-70°	32.3	1.8
70°-80°	12.0	0.7
80°-90°	2.8	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°	1171.3	67.1
0°-40°	1494.2	85.6
0°-60°	1699.0	97.3
0°-90°	1746.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1746.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1918	1918	1918	1918	1918	
5°	1823	1863	1908	1888	1890	169
15°	1592	1629	1681	1691	1693	443
25°	1139	1176	1160	1204	1216	517
35°	530	538	434	524	536	340
45°	216	192	108	173	204	176
55°	116	86	22	77	105	104
65°	53	36	10	33	47	54
75°	18	12	4	10	16	19
85°	3	3	2	2	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°	1918.0	1918.0	1918.0	1918.0	1918.0	1918.0	1918.0	1918.0	1918.0
2.5°	1872.0	1892.8	1891.3	1909.1	1913.5	1909.1	1897.2	1909.1	1907.6
5°	1823.2	1846.9	1863.2	1892.8	1907.6	1904.6	1888.3	1891.3	1889.8
7.5°	1752.1	1781.7	1809.8	1854.3	1882.4	1880.9	1857.2	1852.8	1846.9
10°	1681.0	1709.1	1741.7	1787.6	1824.6	1830.6	1806.9	1801.0	1798.0
12.5°	1639.5	1661.7	1684.0	1723.9	1756.5	1768.4	1755.0	1756.5	1755.0
15°	1592.1	1614.3	1629.2	1658.8	1681.0	1697.3	1691.4	1700.2	1692.8
17.5°	1521.0	1547.7	1553.6	1575.8	1592.1	1602.5	1608.4	1617.3	1605.5
20°	1424.8	1445.5	1452.9	1461.8	1469.2	1482.5	1500.3	1509.2	1495.9
22.5°	1290.0	1330.0	1328.5	1324.1	1331.5	1335.9	1364.0	1378.9	1368.5
25°	1138.9	1180.4	1176.0	1158.2	1159.7	1168.5	1204.1	1223.3	1215.9
27.5°	980.5	1019.0	1008.6	974.5	965.6	979.0	1024.9	1047.1	1042.7
30°	827.9	853.1	836.8	776.1	765.7	782.0	841.2	863.5	851.6
32.5°	663.5	682.8	675.4	601.3	583.5	599.8	669.4	690.2	676.8
35°	530.2	548.0	537.6	450.2	433.9	451.7	524.3	548.0	536.1
37.5°	425.1	438.4	425.1	331.8	316.9	334.7	404.3	435.4	420.6
40°	337.7	348.0	330.3	244.4	232.5	241.4	306.6	337.7	327.3
42.5°	266.6	274.0	254.7	179.2	165.9	177.7	231.0	259.2	253.3
45°	216.2	216.2	192.5	124.4	108.1	120.0	173.3	202.9	204.4
47.5°	185.1	180.7	151.1	82.9	62.2	78.5	137.7	168.8	173.3
50°	160.0	154.0	124.4	60.7	40.0	56.3	114.0	145.1	149.6
52.5°	137.7	133.3	103.7	47.4	28.1	43.0	96.3	125.9	130.3
55°	115.5	112.6	85.9	37.0	22.2	32.6	77.0	102.2	105.2
57.5°	94.8	90.3	69.6	31.1	17.8	26.7	63.7	84.4	87.4
60°	80.0	75.5	56.3	25.2	14.8	20.7	51.8	69.6	72.6
62.5°	66.6	62.2	45.9	20.7	11.8	17.8	41.5	56.3	59.2
65°	53.3	50.4	35.5	16.3	10.4	13.3	32.6	44.4	47.4
67.5°	43.0	40.0	28.1	13.3	8.9	10.4	25.2	35.5	38.5
70°	32.6	29.6	20.7	10.4	7.4	8.9	19.3	26.7	29.6
72.5°	23.7	22.2	16.3	8.9	5.9	7.4	13.3	19.3	22.2
75°	17.8	16.3	11.8	5.9	4.4	5.9	10.4	14.8	16.3
77.5°	11.8	11.8	8.9	4.4	4.4	4.4	7.4	10.4	10.4
80°	8.9	7.4	5.9	3.0	3.0	3.0	4.4	7.4	7.4
82.5°	5.9	4.4	4.4	3.0	3.0	3.0	3.0	4.4	4.4
85°	3.0	3.0	3.0	1.5	1.5	1.5	1.5	3.0	3.0
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)