

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: P857160

Luminaire Tested: **LD4C20D010 EU4209035 4LBMDSWWMH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P857160
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 4LBMDSWWMH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

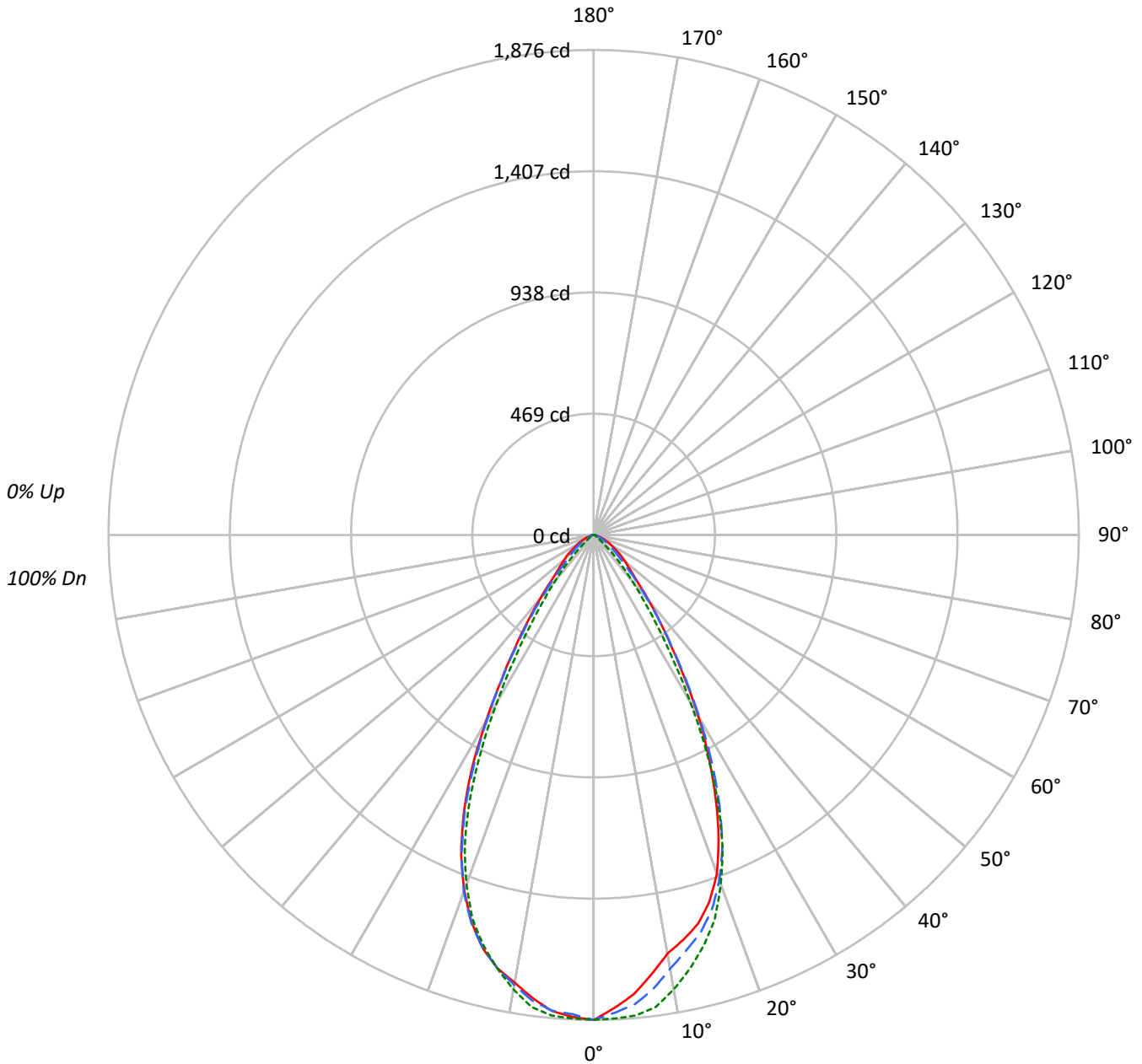
Lumens per Lamp: N/A
Luminaire Lumens: 1708.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	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°	230498	230498	230498
5°	219946	230133	227987
10°	205137	222664	219420
15°	198094	209147	210622
20°	182223	187897	191309
25°	151021	153772	161241
30°	114892	106252	118183
35°	77793	63665	78663
40°	52971	36485	51352
45°	36746	18382	34731
50°	29911	7473	27962
55°	24203	4648	22040
60°	19214	3563	17445
65°	15174	2936	13488
70°	11458	2586	10417
75°	8259	2041	7547
80°	6155	2052	5094
85°	4088	1973	4088



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	10.1
10°-20°	453.2	26.5
20°-30°	520.0	30.4
30°-40°	315.9	18.5
40°-50°	135.4	7.9
50°-60°	64.9	3.8
60°-70°	31.6	1.8
70°-80°	11.7	0.7
80°-90°	2.7	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°	1145.8	67.1
0°-40°	1461.7	85.6
0°-60°	1662.0	97.3
0°-90°	1708.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1708.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1876	1876	1876	1876	1876	
5°	1784	1823	1866	1847	1849	166
15°	1558	1594	1644	1654	1656	434
25°	1114	1150	1134	1178	1190	505
35°	519	526	424	513	524	332
45°	212	188	106	170	200	172
55°	113	84	22	75	103	102
65°	52	35	10	32	46	53
75°	17	12	4	10	16	19
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°	1876.2	1876.2	1876.2	1876.2	1876.2	1876.2	1876.2	1876.2	1876.2
2.5°	1831.3	1851.6	1850.1	1867.5	1871.9	1867.5	1855.9	1867.5	1866.1
5°	1783.5	1806.7	1822.6	1851.6	1866.1	1863.2	1847.2	1850.1	1848.7
7.5°	1713.9	1742.9	1770.4	1813.9	1841.4	1840.0	1816.8	1812.5	1806.7
10°	1644.4	1671.9	1703.8	1748.7	1784.9	1790.7	1767.6	1761.8	1758.9
12.5°	1603.8	1625.6	1647.3	1686.4	1718.3	1729.9	1716.8	1718.3	1716.8
15°	1557.5	1579.2	1593.7	1622.7	1644.4	1660.3	1654.5	1663.2	1656.0
17.5°	1487.9	1514.0	1519.8	1541.5	1557.5	1567.6	1573.4	1582.1	1570.5
20°	1393.8	1414.0	1421.3	1430.0	1437.2	1450.3	1467.6	1476.3	1463.3
22.5°	1261.9	1301.0	1299.6	1295.2	1302.5	1306.8	1334.4	1348.8	1338.7
25°	1114.1	1154.7	1150.4	1133.0	1134.4	1143.1	1177.9	1196.7	1189.5
27.5°	959.1	996.8	986.6	953.3	944.6	957.7	1002.6	1024.3	1020.0
30°	809.9	834.5	818.6	759.2	749.0	765.0	822.9	844.7	833.1
32.5°	649.1	667.9	660.7	588.2	570.8	586.8	654.9	675.1	662.1
35°	518.7	536.1	525.9	440.4	424.5	441.9	512.9	536.1	524.5
37.5°	415.8	428.8	415.8	324.5	310.0	327.4	395.5	426.0	411.5
40°	330.3	340.5	323.1	239.1	227.5	236.2	299.9	330.3	320.2
42.5°	260.8	268.0	249.2	175.3	162.3	173.9	226.0	253.5	247.7
45°	211.5	211.5	188.3	121.7	105.8	117.4	169.5	198.5	199.9
47.5°	181.1	176.8	147.8	81.1	60.9	76.8	134.7	165.2	169.5
50°	156.5	150.7	121.7	59.4	39.1	55.1	111.6	142.0	146.3
52.5°	134.7	130.4	101.4	46.4	27.5	42.0	94.2	123.1	127.5
55°	113.0	110.1	84.0	36.2	21.7	31.9	75.3	100.0	102.9
57.5°	92.7	88.4	68.1	30.4	17.4	26.1	62.3	82.6	85.5
60°	78.2	73.9	55.1	24.6	14.5	20.3	50.7	68.1	71.0
62.5°	65.2	60.9	44.9	20.3	11.6	17.4	40.6	55.1	58.0
65°	52.2	49.3	34.8	15.9	10.1	13.0	31.9	43.5	46.4
67.5°	42.0	39.1	27.5	13.0	8.7	10.1	24.6	34.8	37.7
70°	31.9	29.0	20.3	10.1	7.2	8.7	18.8	26.1	29.0
72.5°	23.2	21.7	15.9	8.7	5.8	7.2	13.0	18.8	21.7
75°	17.4	15.9	11.6	5.8	4.3	5.8	10.1	14.5	15.9
77.5°	11.6	11.6	8.7	4.3	4.3	4.3	7.2	10.1	10.1
80°	8.7	7.2	5.8	2.9	2.9	2.9	4.3	7.2	7.2
82.5°	5.8	4.3	4.3	2.9	2.9	2.9	2.9	4.3	4.3
85°	2.9	2.9	2.9	1.4	1.4	1.4	1.4	2.9	2.9
87.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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)