

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: P857182

Luminaire Tested: **LD4C20D010 EU4209040 4LBMDSWWMH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P857182
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 4LBMDSWWMH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

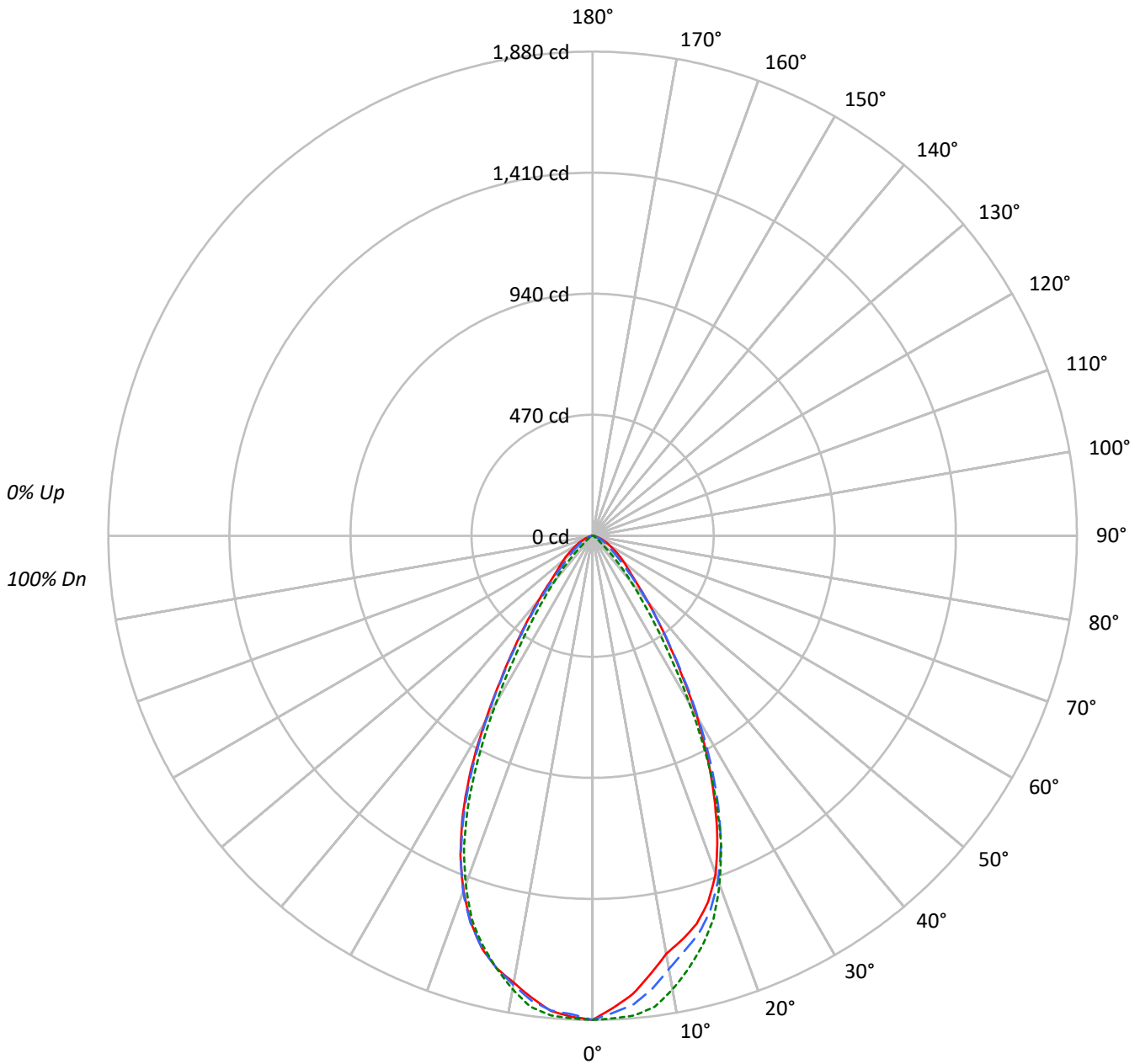
Lumens per Lamp: N/A
Luminaire Lumens: 1711.0 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P857182

CATALOG NUMBER: LD4C20D010 EU4209040 4LBMDSWWMH

Luminous Intensity Polar Plot





TEST NUMBER: P857182

CATALOG NUMBER: LD4C20D010 EU4209040 4LBMDSWWMH

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°	230903	230903	230903
5°	220328	230527	228381
10°	205499	223063	219795
15°	198438	209516	210991
20°	182536	188223	191649
25°	151292	154043	161526
30°	115090	106451	118381
35°	77928	63770	78798
40°	53068	36549	51448
45°	36816	18399	34800
50°	29949	7492	28019
55°	24246	4669	22061
60°	19263	3563	17470
65°	15174	2965	13488
70°	11458	2622	10417
75°	8259	2089	7595
80°	6155	2052	5165
85°	4088	2114	4088



TEST NUMBER: P857182

CATALOG NUMBER: LD4C20D010 EU4209040 4LBMDSWWMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.8	10.1
10°-20°	454.0	26.5
20°-30°	520.9	30.4
30°-40°	316.5	18.5
40°-50°	135.6	7.9
50°-60°	65.1	3.8
60°-70°	31.6	1.8
70°-80°	11.8	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°	1147.8	67.1
0°-40°	1464.2	85.6
0°-60°	1664.9	97.3
0°-90°	1711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1711.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1880	1880	1880	1880	1880	
5°	1787	1826	1869	1850	1852	166
15°	1560	1596	1647	1658	1659	434
25°	1116	1152	1136	1180	1192	506
35°	520	527	425	514	525	333
45°	212	189	106	170	200	172
55°	113	84	22	76	103	102
65°	52	35	10	32	46	53
75°	17	12	4	10	16	19
85°	3	3	2	2	3	4
90°	0	0	0	0	0	



TEST NUMBER: P857182

CATALOG NUMBER: LD4C20D010 EU4209040 4LBMDSWWMH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1879.5	1879.5	1879.5	1879.5	1879.5	1879.5	1879.5	1879.5	1879.5
2.5°	1834.5	1854.8	1853.4	1870.8	1875.2	1870.8	1859.2	1870.8	1869.3
5°	1786.6	1809.8	1825.8	1854.8	1869.3	1866.4	1850.5	1853.4	1851.9
7.5°	1717.0	1746.0	1773.6	1817.1	1844.7	1843.2	1820.0	1815.6	1809.8
10°	1647.3	1674.9	1706.8	1751.8	1788.1	1793.9	1770.7	1764.9	1761.9
12.5°	1606.7	1628.4	1650.2	1689.4	1721.3	1732.9	1719.9	1721.3	1719.9
15°	1560.2	1582.0	1596.5	1625.5	1647.3	1663.3	1657.5	1666.2	1658.9
17.5°	1490.5	1516.7	1522.5	1544.2	1560.2	1570.4	1576.2	1584.9	1573.3
20°	1396.2	1416.5	1423.8	1432.5	1439.7	1452.8	1470.2	1478.9	1465.9
22.5°	1264.1	1303.3	1301.9	1297.5	1304.8	1309.1	1336.7	1351.2	1341.1
25°	1116.1	1156.7	1152.4	1135.0	1136.4	1145.1	1180.0	1198.8	1191.6
27.5°	960.8	998.5	988.4	955.0	946.3	959.3	1004.3	1026.1	1021.8
30°	811.3	836.0	820.0	760.5	750.4	766.3	824.4	846.1	834.5
32.5°	650.2	669.1	661.8	589.3	571.8	587.8	656.0	676.3	663.3
35°	519.6	537.0	526.8	441.2	425.2	442.7	513.8	537.0	525.4
37.5°	416.5	429.6	416.5	325.1	310.6	328.0	396.2	426.7	412.2
40°	330.9	341.1	323.7	239.5	227.9	236.6	300.4	330.9	320.8
42.5°	261.2	268.5	249.6	175.6	162.6	174.2	226.4	254.0	248.2
45°	211.9	211.9	188.7	121.9	105.9	117.6	169.8	198.8	200.3
47.5°	181.4	177.1	148.0	81.3	61.0	76.9	135.0	165.5	169.8
50°	156.7	150.9	121.9	59.5	39.2	55.2	111.8	142.2	146.6
52.5°	135.0	130.6	101.6	46.4	27.6	42.1	94.3	123.4	127.7
55°	113.2	110.3	84.2	36.3	21.8	31.9	75.5	100.1	103.0
57.5°	92.9	88.5	68.2	30.5	17.4	26.1	62.4	82.7	85.6
60°	78.4	74.0	55.2	24.7	14.5	20.3	50.8	68.2	71.1
62.5°	65.3	61.0	45.0	20.3	11.6	17.4	40.6	55.2	58.1
65°	52.2	49.3	34.8	16.0	10.2	13.1	31.9	43.5	46.4
67.5°	42.1	39.2	27.6	13.1	8.7	10.2	24.7	34.8	37.7
70°	31.9	29.0	20.3	10.2	7.3	8.7	18.9	26.1	29.0
72.5°	23.2	21.8	16.0	8.7	5.8	7.3	13.1	18.9	21.8
75°	17.4	16.0	11.6	5.8	4.4	5.8	10.2	14.5	16.0
77.5°	11.6	11.6	8.7	4.4	4.4	4.4	7.3	10.2	10.2
80°	8.7	7.3	5.8	2.9	2.9	2.9	4.4	7.3	7.3
82.5°	5.8	4.4	4.4	2.9	2.9	2.9	2.9	4.4	4.4
85°	2.9	2.9	2.9	1.5	1.5	1.5	1.5	2.9	2.9
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)