

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: P857116

Luminaire Tested: **LD4C20D010 EU4209027 4LBMDSWWMH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P857116
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 EU4209027 4LBMDSWWMH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

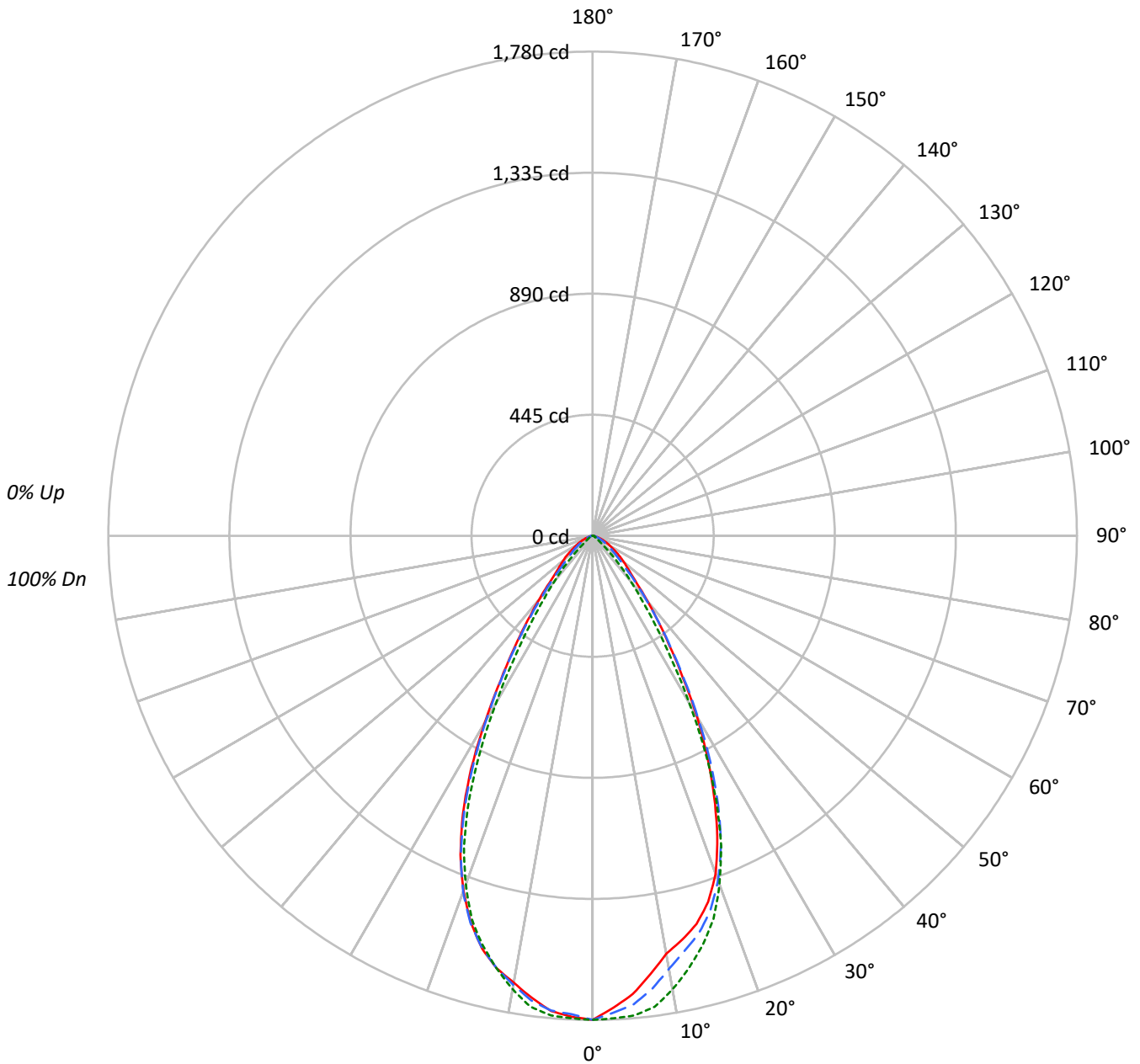
Lumens per Lamp: N/A
Luminaire Lumens: 1620.0 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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				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°	218618	218618	218618
5°	208613	218269	216234
10°	194571	211200	208106
15°	187881	198374	199773
20°	172822	178222	181451
25°	143240	145856	152932
30°	108976	100777	112083
35°	73788	60380	74598
40°	50245	34593	48706
45°	34852	17426	32941
50°	28363	7091	26528
55°	22961	4412	20905
60°	18231	3366	16536
65°	14389	2791	12791
70°	10848	2478	9878
75°	7832	1946	7168
80°	5801	1910	4882
85°	3806	1973	3806



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.6	10.1
10°-20°	429.9	26.5
20°-30°	493.2	30.4
30°-40°	299.6	18.5
40°-50°	128.4	7.9
50°-60°	61.6	3.8
60°-70°	29.9	1.8
70°-80°	11.1	0.7
80°-90°	2.6	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°	1086.7	67.1
0°-40°	1386.4	85.6
0°-60°	1576.4	97.3
0°-90°	1620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1620.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1780	1780	1780	1780	1780	
5°	1692	1729	1770	1752	1753	157
15°	1477	1512	1560	1569	1571	411
25°	1057	1091	1076	1117	1128	479
35°	492	499	403	486	497	315
45°	201	179	100	161	190	163
55°	107	80	21	72	98	97
65°	50	33	10	30	44	50
75°	16	11	4	10	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°	1779.5	1779.5	1779.5	1779.5	1779.5	1779.5	1779.5	1779.5	1779.5
2.5°	1736.9	1756.2	1754.8	1771.3	1775.4	1771.3	1760.3	1771.3	1769.9
5°	1691.6	1713.6	1728.7	1756.2	1769.9	1767.2	1752.1	1754.8	1753.4
7.5°	1625.6	1653.1	1679.2	1720.5	1746.6	1745.2	1723.2	1719.1	1713.6
10°	1559.7	1585.8	1616.0	1658.6	1693.0	1698.5	1676.5	1671.0	1668.2
12.5°	1521.2	1541.8	1562.4	1599.5	1629.8	1640.8	1628.4	1629.8	1628.4
15°	1477.2	1497.8	1511.6	1539.1	1559.7	1574.8	1569.3	1577.5	1570.7
17.5°	1411.3	1436.0	1441.5	1462.1	1477.2	1486.8	1492.3	1500.6	1489.6
20°	1321.9	1341.2	1348.1	1356.3	1363.2	1375.5	1392.0	1400.3	1387.9
22.5°	1196.9	1234.0	1232.6	1228.5	1235.4	1239.5	1265.6	1279.3	1269.7
25°	1056.7	1095.2	1091.1	1074.6	1076.0	1084.2	1117.2	1135.1	1128.2
27.5°	909.7	945.4	935.8	904.2	896.0	908.3	950.9	971.5	967.4
30°	768.2	791.5	776.4	720.1	710.4	725.6	780.5	801.1	790.1
32.5°	615.6	633.5	626.6	557.9	541.4	556.5	621.1	640.4	628.0
35°	492.0	508.4	498.8	417.7	402.6	419.1	486.5	508.4	497.4
37.5°	394.4	406.8	394.4	307.8	294.1	310.6	375.1	404.0	390.3
40°	313.3	322.9	306.4	226.7	215.7	224.0	284.5	313.3	303.7
42.5°	247.4	254.2	236.4	166.3	153.9	164.9	214.4	240.5	235.0
45°	200.6	200.6	178.6	115.4	100.3	111.3	160.8	188.3	189.6
47.5°	171.8	167.6	140.2	77.0	57.7	72.8	127.8	156.7	160.8
50°	148.4	142.9	115.4	56.3	37.1	52.2	105.8	134.7	138.8
52.5°	127.8	123.7	96.2	44.0	26.1	39.9	89.3	116.8	120.9
55°	107.2	104.4	79.7	34.4	20.6	30.2	71.5	94.8	97.6
57.5°	87.9	83.8	64.6	28.9	16.5	24.7	59.1	78.3	81.1
60°	74.2	70.1	52.2	23.4	13.7	19.2	48.1	64.6	67.3
62.5°	61.8	57.7	42.6	19.2	11.0	16.5	38.5	52.2	55.0
65°	49.5	46.7	33.0	15.1	9.6	12.4	30.2	41.2	44.0
67.5°	39.9	37.1	26.1	12.4	8.2	9.6	23.4	33.0	35.7
70°	30.2	27.5	19.2	9.6	6.9	8.2	17.9	24.7	27.5
72.5°	22.0	20.6	15.1	8.2	5.5	6.9	12.4	17.9	20.6
75°	16.5	15.1	11.0	5.5	4.1	5.5	9.6	13.7	15.1
77.5°	11.0	11.0	8.2	4.1	4.1	4.1	6.9	9.6	9.6
80°	8.2	6.9	5.5	2.7	2.7	2.7	4.1	6.9	6.9
82.5°	5.5	4.1	4.1	2.7	2.7	2.7	2.7	4.1	4.1
85°	2.7	2.7	2.7	1.4	1.4	1.4	1.4	2.7	2.7
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)