

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: P857112

Luminaire Tested: **LD4C20D010 EU4209027 4LBMDSWH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P857112
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 4LBMDSWH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBMDSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

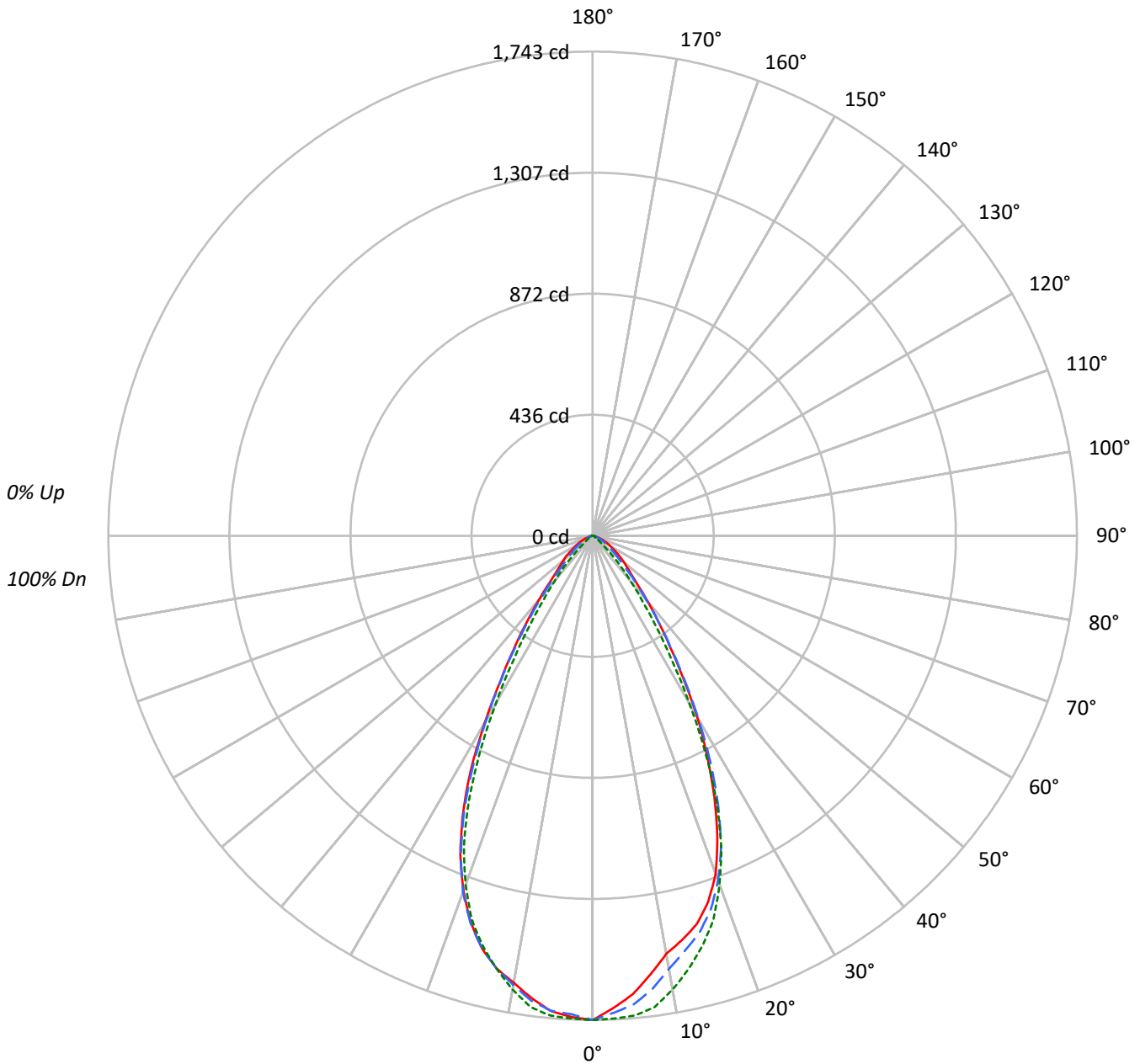
Lumens per Lamp: N/A
Luminaire Lumens: 1587.0 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
Input Voltage (V): NR
Input Current (A_{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									
RC	80									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																			
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92																			
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85																			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78																			
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72																			
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67																			
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62																			
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58																			
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55																			
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51																			
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	214170	214170	214170
5°	204358	213829	211831
10°	190604	206896	203877
15°	184053	194329	195703
20°	169306	174587	177751
25°	140325	142887	149814
30°	106749	98734	109813
35°	72274	59151	73084
40°	49219	33887	47711
45°	34140	17079	32281
50°	27790	6938	25993
55°	22490	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°	160.3	10.1
10°-20°	421.1	26.5
20°-30°	483.2	30.4
30°-40°	293.5	18.5
40°-50°	125.8	7.9
50°-60°	60.4	3.8
60°-70°	29.3	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°	1064.6	67.1
0°-40°	1358.1	85.6
0°-60°	1544.3	97.3
0°-90°	1587.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1587.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1743	1743	1743	1743	1743	
5°	1657	1694	1734	1716	1718	154
15°	1447	1481	1528	1537	1539	403
25°	1035	1069	1054	1094	1105	470
35°	482	489	394	476	487	309
45°	196	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°	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1701.6	1720.4	1719.1	1735.2	1739.3	1735.2	1724.4	1735.2	1733.9
5°	1657.1	1678.7	1693.5	1720.4	1733.9	1731.2	1716.4	1719.1	1717.7
7.5°	1592.5	1619.4	1645.0	1685.4	1711.0	1709.6	1688.1	1684.1	1678.7
10°	1527.9	1553.5	1583.1	1624.8	1658.5	1663.9	1642.3	1636.9	1634.3
12.5°	1490.2	1510.4	1530.6	1566.9	1596.6	1607.3	1595.2	1596.6	1595.2
15°	1447.1	1467.3	1480.8	1507.7	1527.9	1542.7	1537.3	1545.4	1538.7
17.5°	1382.5	1406.8	1412.1	1432.3	1447.1	1456.6	1461.9	1470.0	1459.3
20°	1295.0	1313.9	1320.6	1328.7	1335.4	1347.5	1363.7	1371.8	1359.6
22.5°	1172.5	1208.9	1207.5	1203.5	1210.2	1214.2	1239.8	1253.3	1243.9
25°	1035.2	1072.9	1068.9	1052.7	1054.1	1062.1	1094.4	1111.9	1105.2
27.5°	891.2	926.2	916.7	885.8	877.7	889.8	931.6	951.7	947.7
30°	752.5	775.4	760.6	705.4	696.0	710.8	764.6	784.8	774.1
32.5°	603.1	620.6	613.9	546.5	530.4	545.2	608.5	627.3	615.2
35°	481.9	498.1	488.7	409.2	394.4	410.6	476.5	498.1	487.3
37.5°	386.4	398.5	386.4	301.5	288.1	304.2	367.5	395.8	382.3
40°	306.9	316.4	300.2	222.1	211.3	219.4	278.7	306.9	297.5
42.5°	242.3	249.0	231.5	162.9	150.8	161.5	210.0	235.6	230.2
45°	196.5	196.5	175.0	113.1	98.3	109.0	157.5	184.4	185.8
47.5°	168.3	164.2	137.3	75.4	56.5	71.3	125.2	153.5	157.5
50°	145.4	140.0	113.1	55.2	36.3	51.2	103.7	131.9	136.0
52.5°	125.2	121.2	94.2	43.1	25.6	39.0	87.5	114.4	118.5
55°	105.0	102.3	78.1	33.7	20.2	29.6	70.0	92.9	95.6
57.5°	86.2	82.1	63.3	28.3	16.2	24.2	57.9	76.7	79.4
60°	72.7	68.7	51.2	22.9	13.5	18.8	47.1	63.3	66.0
62.5°	60.6	56.5	41.7	18.8	10.8	16.2	37.7	51.2	53.8
65°	48.5	45.8	32.3	14.8	9.4	12.1	29.6	40.4	43.1
67.5°	39.0	36.3	25.6	12.1	8.1	9.4	22.9	32.3	35.0
70°	29.6	26.9	18.8	9.4	6.7	8.1	17.5	24.2	26.9
72.5°	21.5	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)