

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: P857178

Luminaire Tested: **LD4C20D010 EU4209040 4LBMDSWH**

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-08
Report Number: P857178
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 4LBMDSWH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

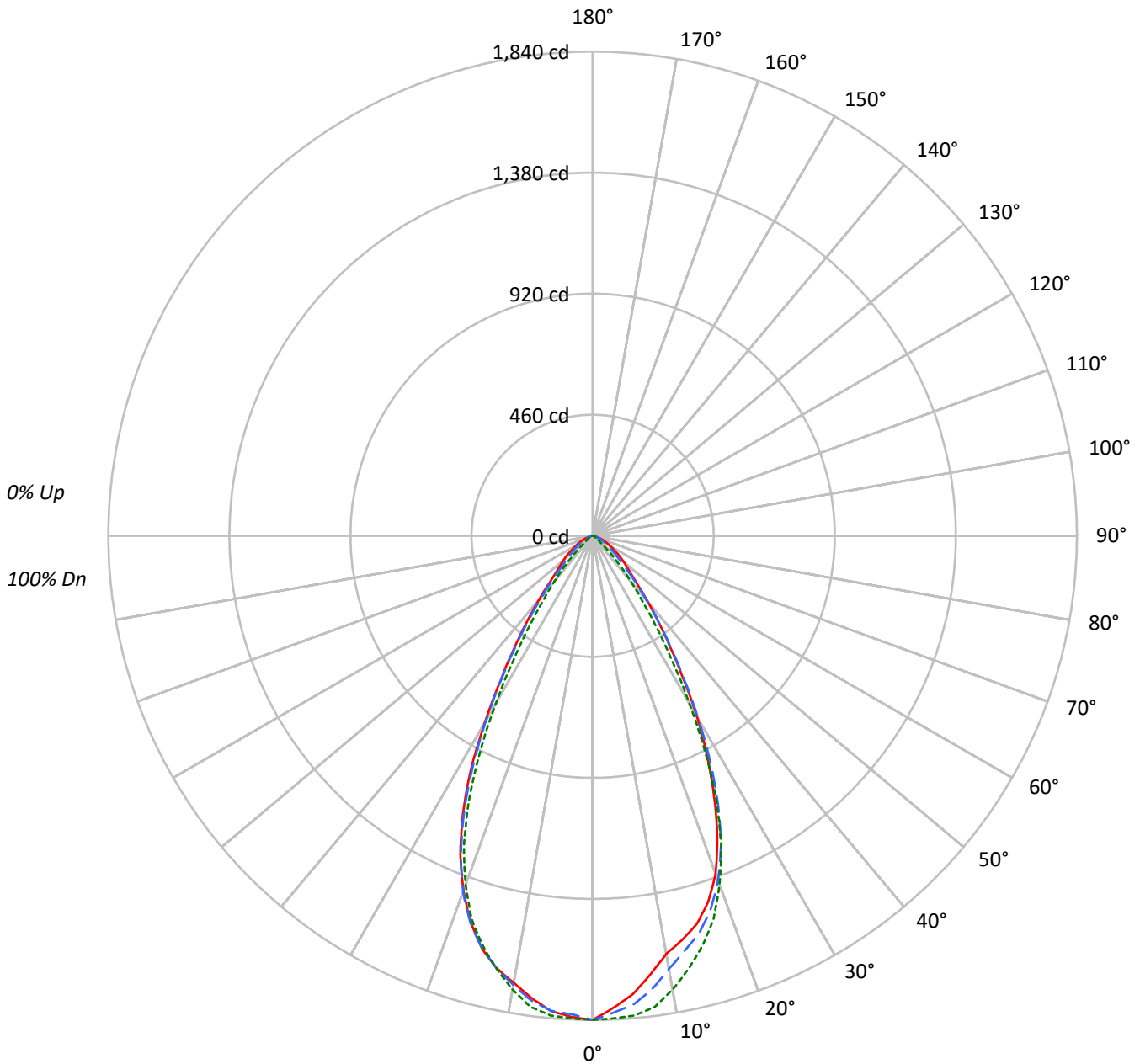
Lumens per Lamp: N/A
Luminaire Lumens: 1675.0 lumens
Efficiency: N/A
Efficacy: 76.8 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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				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°	226050	226050	226050
5°	215691	225681	223584
10°	201170	218373	215179
15°	194266	205102	206552
20°	178693	184275	187609
25°	148106	150804	158124
30°	112664	104210	115899
35°	76293	62435	77133
40°	51945	35779	50357
45°	36034	18017	34071
50°	29319	7339	27427
55°	23732	4562	21612
60°	18846	3489	17101
65°	14855	2878	13227
70°	11243	2550	10201
75°	8069	2041	7405
80°	6014	1981	5023
85°	3947	1973	3947



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.2	10.1
10°-20°	444.5	26.5
20°-30°	510.0	30.4
30°-40°	309.8	18.5
40°-50°	132.8	7.9
50°-60°	63.7	3.8
60°-70°	31.0	1.8
70°-80°	11.5	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°	1123.6	67.1
0°-40°	1433.4	85.6
0°-60°	1629.9	97.3
0°-90°	1675.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1675.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1840	1840	1840	1840	1840	
5°	1749	1787	1830	1812	1813	163
15°	1527	1563	1613	1623	1624	425
25°	1093	1128	1112	1155	1166	496
35°	509	516	416	503	514	326
45°	207	185	104	166	196	169
55°	111	82	21	74	101	100
65°	51	34	10	31	46	52
75°	17	11	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°	1840.0	1840.0	1840.0	1840.0	1840.0	1840.0	1840.0	1840.0	1840.0
2.5°	1795.9	1815.8	1814.4	1831.4	1835.7	1831.4	1820.1	1831.4	1830.0
5°	1749.0	1771.8	1787.4	1815.8	1830.0	1827.2	1811.5	1814.4	1813.0
7.5°	1680.8	1709.2	1736.2	1778.9	1805.9	1804.4	1781.7	1777.4	1771.8
10°	1612.6	1639.6	1670.9	1714.9	1750.5	1756.1	1733.4	1727.7	1724.9
12.5°	1572.8	1594.2	1615.5	1653.8	1685.1	1696.5	1683.7	1685.1	1683.7
15°	1527.4	1548.7	1562.9	1591.3	1612.6	1628.3	1622.6	1631.1	1624.0
17.5°	1459.2	1484.8	1490.4	1511.8	1527.4	1537.3	1543.0	1551.5	1540.2
20°	1366.8	1386.7	1393.8	1402.4	1409.5	1422.2	1439.3	1447.8	1435.0
22.5°	1237.5	1275.9	1274.5	1270.2	1277.3	1281.6	1308.6	1322.8	1312.8
25°	1092.6	1132.4	1128.1	1111.1	1112.5	1121.0	1155.1	1173.6	1166.5
27.5°	940.6	977.5	967.6	934.9	926.4	939.2	983.2	1004.5	1000.3
30°	794.2	818.4	802.8	744.5	734.6	750.2	807.0	828.3	817.0
32.5°	636.5	655.0	647.9	576.9	559.8	575.4	642.2	662.1	649.3
35°	508.7	525.7	515.8	431.9	416.3	433.4	503.0	525.7	514.3
37.5°	407.8	420.6	407.8	318.3	304.1	321.1	387.9	417.7	403.5
40°	323.9	333.9	316.8	234.4	223.1	231.6	294.1	323.9	314.0
42.5°	255.7	262.9	244.4	171.9	159.1	170.5	221.6	248.6	243.0
45°	207.4	207.4	184.7	119.3	103.7	115.1	166.2	194.7	196.1
47.5°	177.6	173.3	144.9	79.6	59.7	75.3	132.1	162.0	166.2
50°	153.4	147.8	119.3	58.3	38.4	54.0	109.4	139.2	143.5
52.5°	132.1	127.9	99.5	45.5	27.0	41.2	92.4	120.8	125.0
55°	110.8	108.0	82.4	35.5	21.3	31.3	73.9	98.0	100.9
57.5°	90.9	86.7	66.8	29.8	17.0	25.6	61.1	81.0	83.8
60°	76.7	72.5	54.0	24.2	14.2	19.9	49.7	66.8	69.6
62.5°	63.9	59.7	44.0	19.9	11.4	17.0	39.8	54.0	56.8
65°	51.1	48.3	34.1	15.6	9.9	12.8	31.3	42.6	45.5
67.5°	41.2	38.4	27.0	12.8	8.5	9.9	24.2	34.1	36.9
70°	31.3	28.4	19.9	9.9	7.1	8.5	18.5	25.6	28.4
72.5°	22.7	21.3	15.6	8.5	5.7	7.1	12.8	18.5	21.3
75°	17.0	15.6	11.4	5.7	4.3	5.7	9.9	14.2	15.6
77.5°	11.4	11.4	8.5	4.3	4.3	4.3	7.1	9.9	9.9
80°	8.5	7.1	5.7	2.8	2.8	2.8	4.3	7.1	7.1
82.5°	5.7	4.3	4.3	2.8	2.8	2.8	2.8	4.3	4.3
85°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	2.8	2.8
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)