

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: P857156

Luminaire Tested: **LD4C20D010 EU4209035 4LBMDSWH**

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-08
Report Number: P857156
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 4LBMDSWH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBMDSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

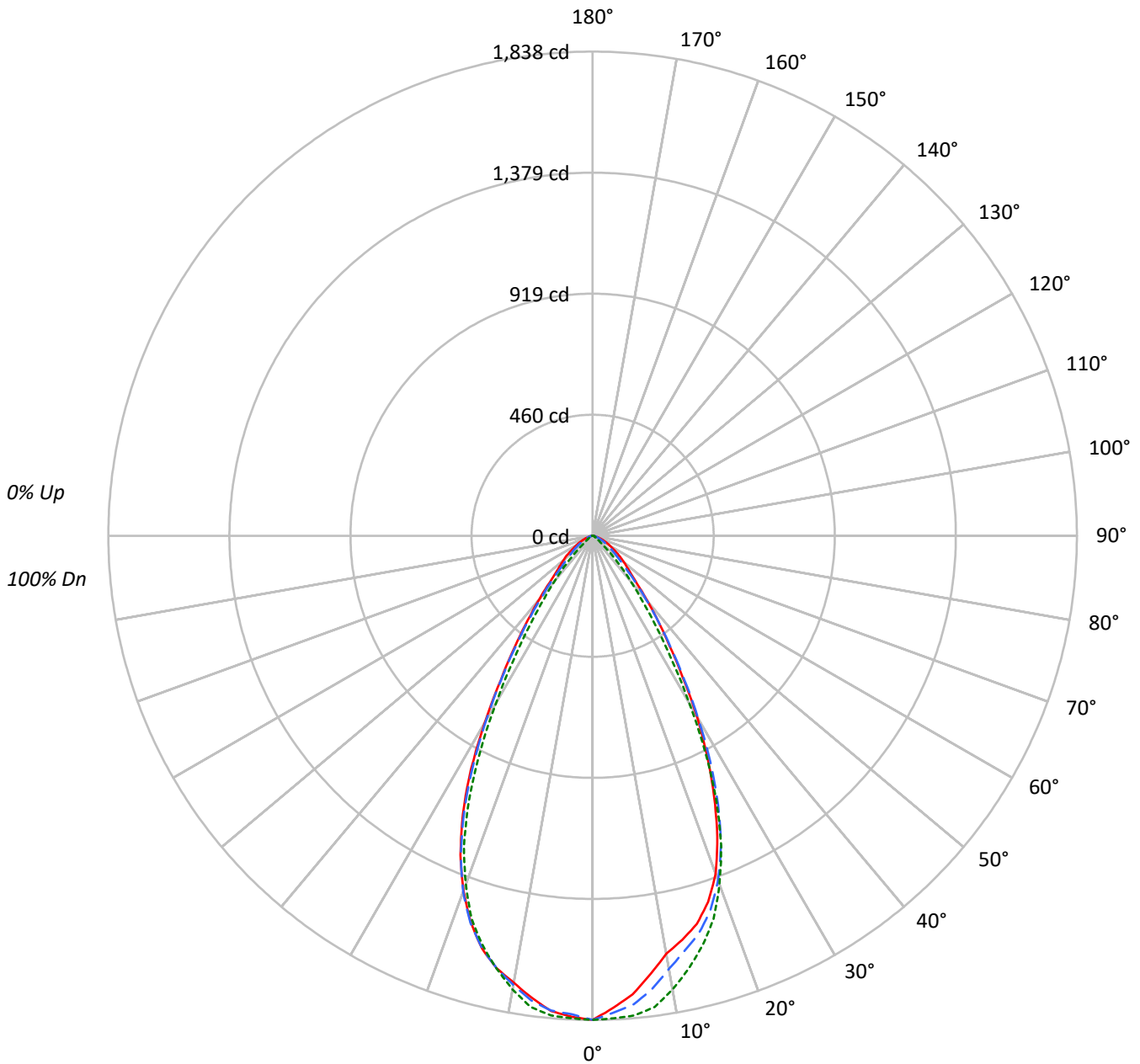
Lumens per Lamp: N/A
Luminaire Lumens: 1673.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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				
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°	225780	225780	225780
5°	215433	225409	223313
10°	200933	218111	214917
15°	194037	204861	206310
20°	178483	184053	187387
25°	147930	150627	157934
30°	112537	104082	115757
35°	76188	62360	77043
40°	51897	35731	50293
45°	35999	18000	34018
50°	29300	7320	27388
55°	23711	4562	21590
60°	18821	3489	17077
65°	14855	2878	13198
70°	11207	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°	169.0	10.1
10°-20°	444.0	26.5
20°-30°	509.4	30.4
30°-40°	309.4	18.5
40°-50°	132.6	7.9
50°-60°	63.6	3.8
60°-70°	30.9	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°	1122.3	67.1
0°-40°	1431.7	85.6
0°-60°	1627.9	97.3
0°-90°	1673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1673.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1838	1838	1838	1838	1838	
5°	1747	1785	1828	1809	1811	162
15°	1526	1561	1611	1621	1622	425
25°	1091	1127	1111	1154	1165	495
35°	508	515	416	502	514	326
45°	207	184	104	166	196	168
55°	111	82	21	74	101	100
65°	51	34	10	31	45	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°	1837.8	1837.8	1837.8	1837.8	1837.8	1837.8	1837.8	1837.8	1837.8
2.5°	1793.8	1813.6	1812.2	1829.3	1833.5	1829.3	1817.9	1829.3	1827.8
5°	1746.9	1769.6	1785.3	1813.6	1827.8	1825.0	1809.4	1812.2	1810.8
7.5°	1678.8	1707.2	1734.2	1776.7	1803.7	1802.3	1779.6	1775.3	1769.6
10°	1610.7	1637.7	1668.9	1712.9	1748.4	1754.0	1731.3	1725.7	1722.8
12.5°	1571.0	1592.3	1613.5	1651.9	1683.1	1694.4	1681.7	1683.1	1681.7
15°	1525.6	1546.8	1561.0	1589.4	1610.7	1626.3	1620.6	1629.2	1622.1
17.5°	1457.4	1483.0	1488.7	1509.9	1525.6	1535.5	1541.2	1549.7	1538.3
20°	1365.2	1385.1	1392.2	1400.7	1407.8	1420.5	1437.6	1446.1	1433.3
22.5°	1236.1	1274.4	1273.0	1268.7	1275.8	1280.1	1307.0	1321.2	1311.3
25°	1091.3	1131.0	1126.8	1109.8	1111.2	1119.7	1153.7	1172.2	1165.1
27.5°	939.5	976.4	966.4	933.8	925.3	938.0	982.0	1003.3	999.1
30°	793.3	817.4	801.8	743.6	733.7	749.3	806.1	827.3	816.0
32.5°	635.8	654.2	647.1	576.2	559.1	574.7	641.4	661.3	648.5
35°	508.0	525.1	515.1	431.4	415.8	432.8	502.4	525.1	513.7
37.5°	407.3	420.1	407.3	317.9	303.7	320.7	387.4	417.2	403.0
40°	323.6	333.5	316.5	234.2	222.8	231.3	293.8	323.6	313.6
42.5°	255.4	262.5	244.1	171.7	158.9	170.3	221.4	248.3	242.7
45°	207.2	207.2	184.5	119.2	103.6	114.9	166.0	194.4	195.8
47.5°	177.4	173.1	144.8	79.5	59.6	75.2	132.0	161.8	166.0
50°	153.3	147.6	119.2	58.2	38.3	53.9	109.3	139.1	143.3
52.5°	132.0	127.7	99.3	45.4	27.0	41.2	92.2	120.6	124.9
55°	110.7	107.9	82.3	35.5	21.3	31.2	73.8	97.9	100.8
57.5°	90.8	86.6	66.7	29.8	17.0	25.5	61.0	80.9	83.7
60°	76.6	72.4	53.9	24.1	14.2	19.9	49.7	66.7	69.5
62.5°	63.9	59.6	44.0	19.9	11.4	17.0	39.7	53.9	56.8
65°	51.1	48.3	34.1	15.6	9.9	12.8	31.2	42.6	45.4
67.5°	41.2	38.3	27.0	12.8	8.5	9.9	24.1	34.1	36.9
70°	31.2	28.4	19.9	9.9	7.1	8.5	18.4	25.5	28.4
72.5°	22.7	21.3	15.6	8.5	5.7	7.1	12.8	18.4	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)