

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: P857138

Luminaire Tested: **LD4C20D010 EU4209030 4LBMDSWWMH**

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-08
Report Number: P857138
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 EU4209030 4LBMDSWWMH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

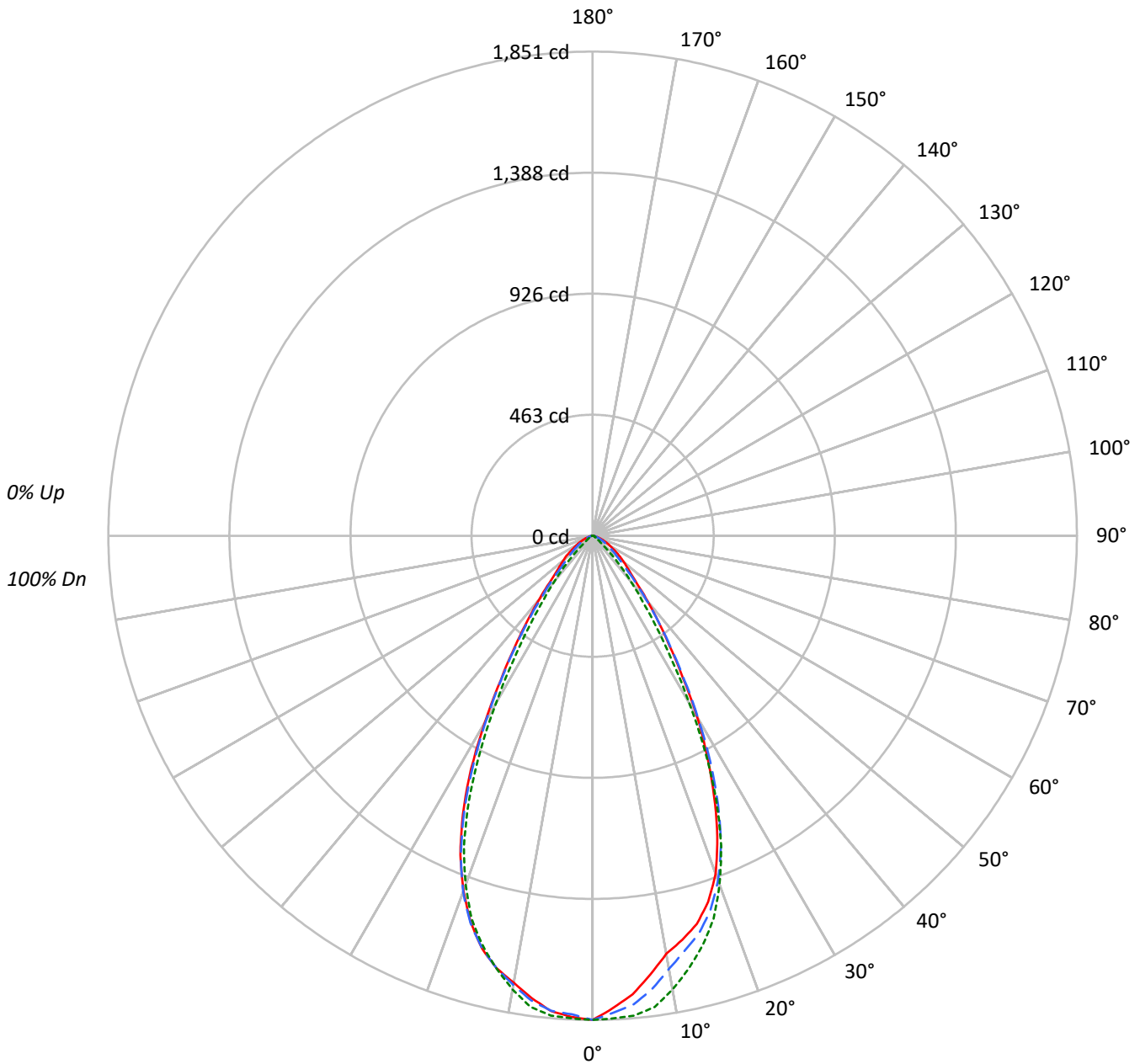
Lumens per Lamp: N/A
Luminaire Lumens: 1685.0 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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				
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°	227389	227389	227389
5°	216986	227025	224916
10°	202380	219670	216464
15°	195423	206336	207786
20°	179765	185373	188733
25°	148987	151698	159072
30°	113345	104820	116580
35°	76743	62810	77598
40°	52266	35988	50662
45°	36260	18121	34262
50°	29510	7377	27599
55°	23882	4584	21740
60°	18969	3514	17199
65°	14971	2907	13285
70°	11279	2550	10273
75°	8164	2041	7452
80°	6084	2052	5023
85°	4088	1973	4088



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	10.1
10°-20°	447.1	26.5
20°-30°	513.0	30.4
30°-40°	311.6	18.5
40°-50°	133.6	7.9
50°-60°	64.1	3.8
60°-70°	31.2	1.8
70°-80°	11.6	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°	1130.3	67.1
0°-40°	1442.0	85.6
0°-60°	1639.6	97.3
0°-90°	1685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1685.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1851	1851	1851	1851	1851	
5°	1760	1798	1841	1822	1824	163
15°	1536	1572	1622	1632	1634	428
25°	1099	1135	1119	1162	1174	499
35°	512	519	419	506	517	328
45°	209	186	104	167	197	170
55°	112	83	21	74	102	101
65°	52	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°	1850.9	1850.9	1850.9	1850.9	1850.9	1850.9	1850.9	1850.9	1850.9
2.5°	1806.6	1826.6	1825.2	1842.4	1846.7	1842.4	1830.9	1842.4	1840.9
5°	1759.5	1782.3	1798.1	1826.6	1840.9	1838.1	1822.4	1825.2	1823.8
7.5°	1690.9	1719.5	1746.6	1789.5	1816.6	1815.2	1792.3	1788.1	1782.3
10°	1622.3	1649.4	1680.9	1725.2	1760.9	1766.6	1743.8	1738.0	1735.2
12.5°	1582.2	1603.7	1625.1	1663.7	1695.2	1706.6	1693.7	1695.2	1693.7
15°	1536.5	1557.9	1572.2	1600.8	1622.3	1638.0	1632.3	1640.8	1633.7
17.5°	1467.9	1493.6	1499.3	1520.8	1536.5	1546.5	1552.2	1560.8	1549.4
20°	1375.0	1395.0	1402.1	1410.7	1417.9	1430.7	1447.9	1456.5	1443.6
22.5°	1244.9	1283.5	1282.1	1277.8	1284.9	1289.2	1316.4	1330.7	1320.7
25°	1099.1	1139.2	1134.9	1117.7	1119.1	1127.7	1162.0	1180.6	1173.5
27.5°	946.2	983.4	973.4	940.5	931.9	944.8	989.1	1010.5	1006.2
30°	799.0	823.3	807.6	749.0	738.9	754.7	811.8	833.3	821.8
32.5°	640.3	658.9	651.8	580.3	563.1	578.9	646.0	666.1	653.2
35°	511.7	528.8	518.8	434.5	418.8	435.9	506.0	528.8	517.4
37.5°	410.2	423.1	410.2	320.2	305.9	323.0	390.2	420.2	405.9
40°	325.9	335.9	318.7	235.8	224.4	233.0	295.9	325.9	315.9
42.5°	257.3	264.4	245.8	172.9	160.1	171.5	223.0	250.1	244.4
45°	208.7	208.7	185.8	120.1	104.3	115.8	167.2	195.8	197.2
47.5°	178.7	174.4	145.8	80.0	60.0	75.8	132.9	162.9	167.2
50°	154.4	148.6	120.1	58.6	38.6	54.3	110.1	140.1	144.4
52.5°	132.9	128.6	100.1	45.7	27.2	41.4	92.9	121.5	125.8
55°	111.5	108.6	82.9	35.7	21.4	31.4	74.3	98.6	101.5
57.5°	91.5	87.2	67.2	30.0	17.2	25.7	61.5	81.5	84.3
60°	77.2	72.9	54.3	24.3	14.3	20.0	50.0	67.2	70.0
62.5°	64.3	60.0	44.3	20.0	11.4	17.2	40.0	54.3	57.2
65°	51.5	48.6	34.3	15.7	10.0	12.9	31.4	42.9	45.7
67.5°	41.4	38.6	27.2	12.9	8.6	10.0	24.3	34.3	37.2
70°	31.4	28.6	20.0	10.0	7.1	8.6	18.6	25.7	28.6
72.5°	22.9	21.4	15.7	8.6	5.7	7.1	12.9	18.6	21.4
75°	17.2	15.7	11.4	5.7	4.3	5.7	10.0	14.3	15.7
77.5°	11.4	11.4	8.6	4.3	4.3	4.3	7.1	10.0	10.0
80°	8.6	7.1	5.7	2.9	2.9	2.9	4.3	7.1	7.1
82.5°	5.7	4.3	4.3	2.9	2.9	2.9	2.9	4.3	4.3
85°	2.9	2.9	2.9	1.4	1.4	1.4	1.4	2.9	2.9
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)