

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: P857200

Luminaire Tested: **LD4C20D010 EU4209050 4LBMDSWH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P857200
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 EU4209050 4LBMDSWH
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

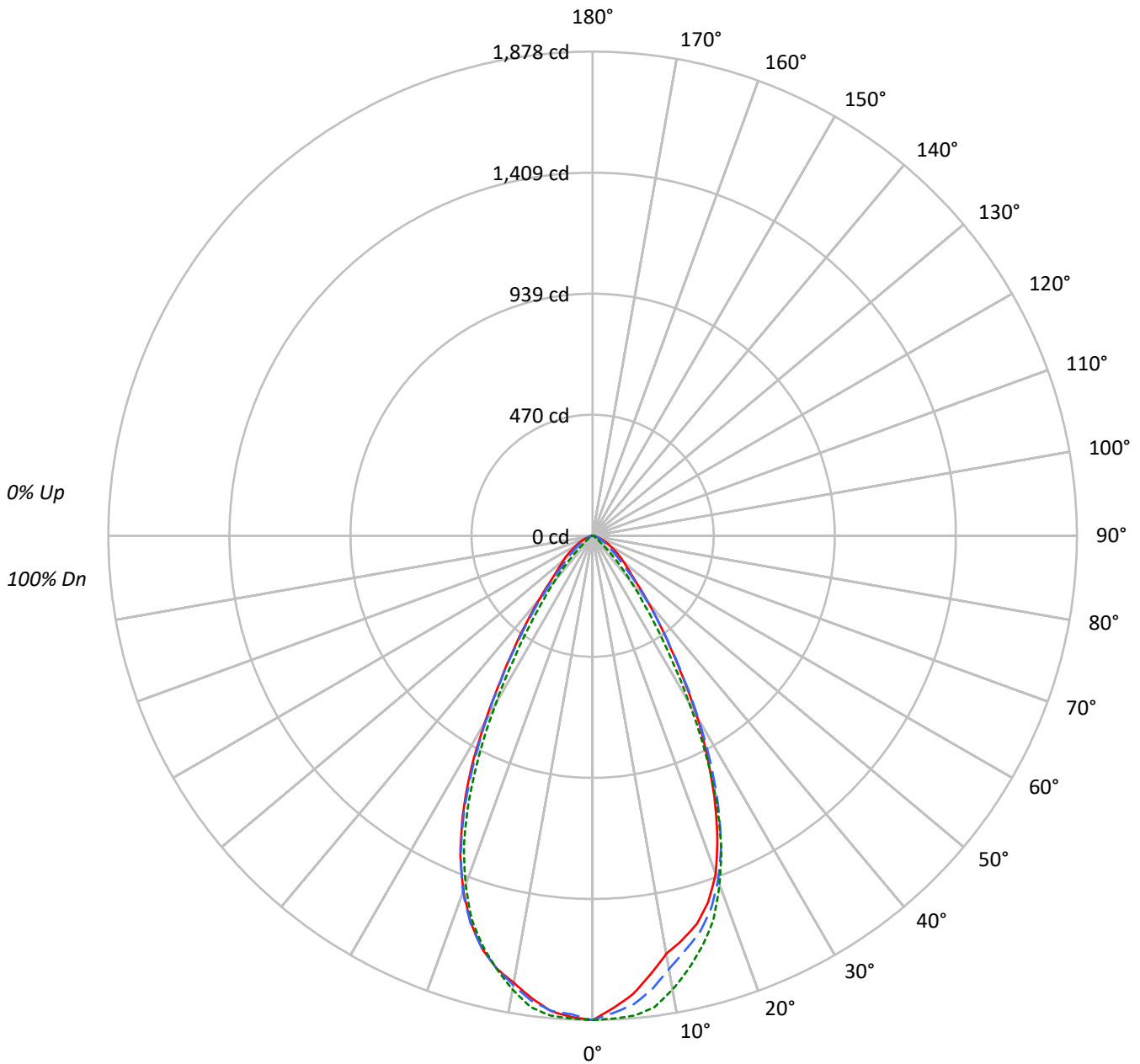
Lumens per Lamp: N/A
Luminaire Lumens: 1710.1 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	230768	230768	230768
5°	220205	230404	228258
10°	205374	222926	219670
15°	198323	209388	210864
20°	182432	188119	191531
25°	151197	153948	161431
30°	115019	106380	118310
35°	77883	63740	78753
40°	53036	36517	51416
45°	36798	18399	34783
50°	29949	7492	28000
55°	24225	4669	22061
60°	19239	3563	17470
65°	15174	2965	13488
70°	11458	2622	10417
75°	8259	2089	7595
80°	6155	2052	5165
85°	4088	2114	4088



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.7	10.1
10°-20°	453.8	26.5
20°-30°	520.6	30.4
30°-40°	316.3	18.5
40°-50°	135.5	7.9
50°-60°	65.0	3.8
60°-70°	31.6	1.8
70°-80°	11.8	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°	1147.1	67.1
0°-40°	1463.4	85.6
0°-60°	1664.0	97.3
0°-90°	1710.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1710.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1878	1878	1878	1878	1878	
5°	1786	1825	1868	1849	1851	166
15°	1559	1596	1646	1656	1658	434
25°	1115	1152	1136	1179	1191	506
35°	519	526	425	514	525	333
45°	212	189	106	170	200	172
55°	113	84	22	75	103	102
65°	52	35	10	32	46	53
75°	17	12	4	10	16	19
85°	3	3	2	2	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°	1878.4	1878.4	1878.4	1878.4	1878.4	1878.4	1878.4	1878.4	1878.4
2.5°	1833.4	1853.8	1852.3	1869.7	1874.1	1869.7	1858.1	1869.7	1868.3
5°	1785.6	1808.8	1824.7	1853.8	1868.3	1865.4	1849.4	1852.3	1850.9
7.5°	1716.0	1745.0	1772.5	1816.0	1843.6	1842.1	1818.9	1814.6	1808.8
10°	1646.3	1673.9	1705.8	1750.8	1787.0	1792.8	1769.6	1763.8	1760.9
12.5°	1605.7	1627.5	1649.2	1688.4	1720.3	1731.9	1718.9	1720.3	1718.9
15°	1559.3	1581.1	1595.6	1624.6	1646.3	1662.3	1656.5	1665.2	1657.9
17.5°	1489.7	1515.8	1521.6	1543.3	1559.3	1569.5	1575.3	1584.0	1572.4
20°	1395.4	1415.7	1423.0	1431.7	1438.9	1452.0	1469.4	1478.1	1465.0
22.5°	1263.4	1302.6	1301.1	1296.8	1304.0	1308.4	1335.9	1350.4	1340.3
25°	1115.4	1156.1	1151.7	1134.3	1135.7	1144.5	1179.3	1198.1	1190.9
27.5°	960.2	998.0	987.8	954.4	945.7	958.8	1003.8	1025.5	1021.2
30°	810.8	835.5	819.5	760.1	749.9	765.9	823.9	845.6	834.0
32.5°	649.8	668.7	661.4	588.9	571.5	587.5	655.6	675.9	662.9
35°	519.3	536.7	526.5	441.0	425.0	442.4	513.5	536.7	525.1
37.5°	416.3	429.4	416.3	324.9	310.4	327.8	396.0	426.4	411.9
40°	330.7	340.9	323.5	239.3	227.7	236.4	300.3	330.7	320.6
42.5°	261.1	268.3	249.5	175.5	162.5	174.1	226.3	253.8	248.0
45°	211.8	211.8	188.6	121.8	105.9	117.5	169.7	198.7	200.2
47.5°	181.3	177.0	148.0	81.2	60.9	76.9	134.9	165.4	169.7
50°	156.7	150.9	121.8	59.5	39.2	55.1	111.7	142.1	146.5
52.5°	134.9	130.5	101.5	46.4	27.6	42.1	94.3	123.3	127.6
55°	113.1	110.2	84.1	36.3	21.8	31.9	75.4	100.1	103.0
57.5°	92.8	88.5	68.2	30.5	17.4	26.1	62.4	82.7	85.6
60°	78.3	74.0	55.1	24.7	14.5	20.3	50.8	68.2	71.1
62.5°	65.3	60.9	45.0	20.3	11.6	17.4	40.6	55.1	58.0
65°	52.2	49.3	34.8	16.0	10.2	13.1	31.9	43.5	46.4
67.5°	42.1	39.2	27.6	13.1	8.7	10.2	24.7	34.8	37.7
70°	31.9	29.0	20.3	10.2	7.3	8.7	18.9	26.1	29.0
72.5°	23.2	21.8	16.0	8.7	5.8	7.3	13.1	18.9	21.8
75°	17.4	16.0	11.6	5.8	4.4	5.8	10.2	14.5	16.0
77.5°	11.6	11.6	8.7	4.4	4.4	4.4	7.3	10.2	10.2
80°	8.7	7.3	5.8	2.9	2.9	2.9	4.4	7.3	7.3
82.5°	5.8	4.4	4.4	2.9	2.9	2.9	2.9	4.4	4.4
85°	2.9	2.9	2.9	1.5	1.5	1.5	1.5	2.9	2.9
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)