

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: P857176

Luminaire Tested: **LD4C20D010 EU4209040 4LBMDDWLI**

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P857176  
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 4LBMDDWLI  
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS  
AND 4LBMDDW TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

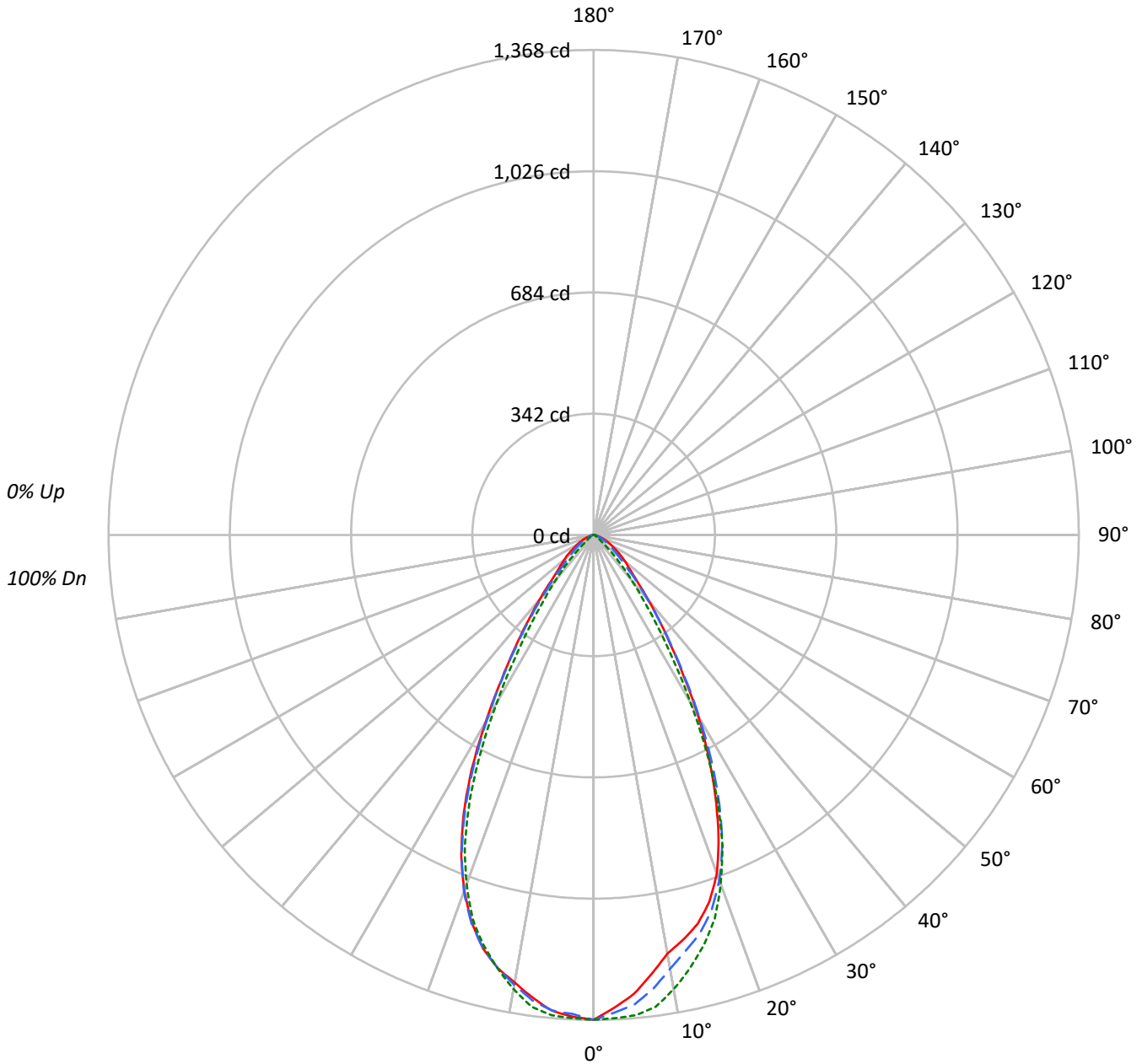
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1245.0 lumens  
Efficiency: N/A  
Efficacy: 57.1 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<sub>in</sub>): 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°	168014	168014	168014
5°	160320	167744	166177
10°	149524	162311	159940
15°	144396	152447	153528
20°	132817	136961	139445
25°	110083	112089	117525
30°	83739	77455	86137
35°	56706	46403	57336
40°	38618	26590	37431
45°	26791	13395	25314
50°	21807	5447	20393
55°	17649	3384	16064
60°	14005	2604	12703
65°	11046	2151	9826
70°	8333	1904	7579
75°	6028	1519	5506
80°	4457	1486	3750
85°	2960	1551	2960



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.7	10.1
10°-20°	330.4	26.5
20°-30°	379.1	30.4
30°-40°	230.3	18.5
40°-50°	98.7	7.9
50°-60°	47.3	3.8
60°-70°	23.0	1.8
70°-80°	8.5	0.7
80°-90°	2.0	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°	835.2	67.1
0°-40°	1065.4	85.6
0°-60°	1211.5	97.3
0°-90°	1245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1245.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1368	1368	1368	1368	1368	
5°	1300	1328	1360	1346	1348	121
15°	1135	1162	1199	1206	1207	316
25°	812	838	827	859	867	368
35°	378	383	309	374	382	242
45°	154	137	77	124	146	125
55°	82	61	16	55	75	74
65°	38	25	7	23	34	39
75°	13	8	3	7	12	14
85°	2	2	1	1	2	3
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°	1367.6	1367.6	1367.6	1367.6	1367.6	1367.6	1367.6	1367.6	1367.6
2.5°	1334.9	1349.7	1348.6	1361.3	1364.4	1361.3	1352.8	1361.3	1360.2
5°	1300.0	1316.9	1328.5	1349.7	1360.2	1358.1	1346.5	1348.6	1347.5
7.5°	1249.3	1270.5	1290.5	1322.2	1342.3	1341.2	1324.3	1321.1	1316.9
10°	1198.6	1218.7	1241.9	1274.7	1301.1	1305.3	1288.4	1284.2	1282.1
12.5°	1169.1	1184.9	1200.8	1229.3	1252.5	1261.0	1251.4	1252.5	1251.4
15°	1135.3	1151.1	1161.7	1182.8	1198.6	1210.3	1206.0	1212.4	1207.1
17.5°	1084.6	1103.6	1107.8	1123.7	1135.3	1142.7	1146.9	1153.2	1144.8
20°	1015.9	1030.7	1036.0	1042.3	1047.6	1057.1	1069.8	1076.1	1066.6
22.5°	919.8	948.4	947.3	944.1	949.4	952.6	972.6	983.2	975.8
25°	812.1	841.7	838.5	825.8	826.9	833.2	858.6	872.3	867.0
27.5°	699.1	726.6	719.2	694.9	688.6	698.1	730.8	746.6	743.5
30°	590.3	608.3	596.7	553.4	546.0	557.6	599.8	615.7	607.2
32.5°	473.1	486.8	481.6	428.8	416.1	427.7	477.3	492.1	482.6
35°	378.1	390.7	383.4	321.0	309.4	322.1	373.8	390.7	382.3
37.5°	303.1	312.6	303.1	236.6	226.0	238.7	288.3	310.5	299.9
40°	240.8	248.2	235.5	174.3	165.8	172.1	218.6	240.8	233.4
42.5°	190.1	195.4	181.6	127.8	118.3	126.7	164.7	184.8	180.6
45°	154.2	154.2	137.3	88.7	77.1	85.5	123.6	144.7	145.7
47.5°	132.0	128.8	107.7	59.1	44.4	56.0	98.2	120.4	123.6
50°	114.1	109.8	88.7	43.3	28.5	40.1	81.3	103.5	106.7
52.5°	98.2	95.0	73.9	33.8	20.1	30.6	68.6	89.8	92.9
55°	82.4	80.3	61.3	26.4	15.8	23.2	54.9	72.9	75.0
57.5°	67.6	64.4	49.6	22.2	12.7	19.0	45.4	60.2	62.3
60°	57.0	53.9	40.1	18.0	10.6	14.8	37.0	49.6	51.7
62.5°	47.5	44.4	32.7	14.8	8.4	12.7	29.6	40.1	42.2
65°	38.0	35.9	25.3	11.6	7.4	9.5	23.2	31.7	33.8
67.5°	30.6	28.5	20.1	9.5	6.3	7.4	18.0	25.3	27.5
70°	23.2	21.1	14.8	7.4	5.3	6.3	13.7	19.0	21.1
72.5°	16.9	15.8	11.6	6.3	4.2	5.3	9.5	13.7	15.8
75°	12.7	11.6	8.4	4.2	3.2	4.2	7.4	10.6	11.6
77.5°	8.4	8.4	6.3	3.2	3.2	3.2	5.3	7.4	7.4
80°	6.3	5.3	4.2	2.1	2.1	2.1	3.2	5.3	5.3
82.5°	4.2	3.2	3.2	2.1	2.1	2.1	2.1	3.2	3.2
85°	2.1	2.1	2.1	1.1	1.1	1.1	1.1	2.1	2.1
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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)