

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: P563804

Luminaire Tested: **LD4C25D010 EX4C259030 4LBCSSQMMS**

Issue Date: 5/25/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563804  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209253)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/25/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C25D010 EX4C259030 4LBCSSQMMS  
Description: 4 INCH 2500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS  
AND 4LBCSSQ TRIM WITH MMS FINISH, DIM TO WARM  
Light Source: -  
Ballast/Driver: -

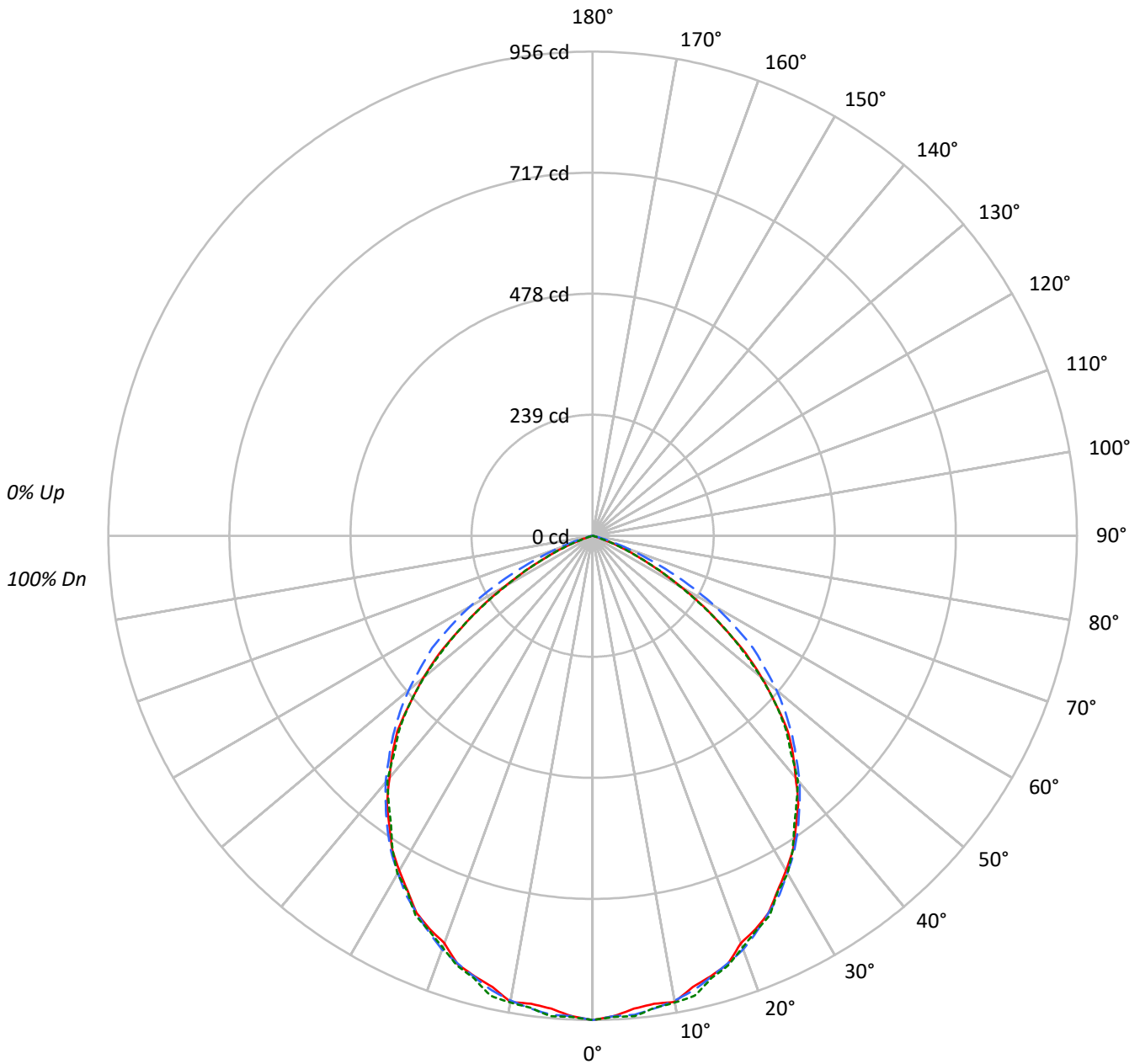
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2042.5 lumens  
Efficiency: N/A  
Efficacy: 64.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.5  
Input Voltage (V):  
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								
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89								
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77								
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67								
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59								
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52								
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46								
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41								
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33								
10	57	45	38	33	56	44	37	33	44	37	32	43	37	32	42	36	32	31								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	92263	92263	92263
5°	90765	91956	92218
10°	91560	91295	91687
15°	89953	90083	90353
20°	87864	89251	88840
25°	87481	87481	88056
30°	85044	85645	85801
35°	82383	83184	81747
40°	78522	80058	79378
45°	74314	75979	73577
50°	65448	71152	65043
55°	53007	65102	53243
60°	38789	53995	37997
65°	23562	38448	22945
70°	9197	20679	8802
75°	1007	5592	1007
80°	778	778	778
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.3	4.4
10°-20°	255.4	12.5
20°-30°	379.0	18.6
30°-40°	439.1	21.5
40°-50°	421.0	20.6
50°-60°	309.5	15.2
60°-70°	133.7	6.5
70°-80°	14.4	0.7
80°-90°	0.2	0.0
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°	724.6	35.5
0°-40°	1163.7	57.0
0°-60°	1894.2	92.7
0°-90°	2042.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2042.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	937	947	949	951	952	89
15°	900	906	902	903	904	254
25°	822	820	822	823	827	376
35°	699	704	706	705	694	437
45°	545	546	557	549	539	414
55°	315	348	387	346	316	284
65°	103	129	168	128	100	106
75°	3	4	15	3	3	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	956.2	956.2	956.2	956.2	956.2	956.2	956.2	956.2	956.2	956.2	956.2
2.5°	949.4	960.2	961.6	954.7	952.1	948.0	957.5	950.8	953.4	950.8	949.4
5°	937.1	949.4	950.8	950.8	948.0	946.6	950.8	949.4	948.0	945.3	949.4
7.5°	931.8	938.5	945.3	937.1	941.2	939.9	949.4	945.3	944.0	944.0	941.2
10°	934.5	933.1	938.5	930.3	933.1	930.3	938.5	938.5	935.8	933.1	931.8
12.5°	912.6	923.5	923.5	922.2	919.4	915.4	923.5	929.0	920.9	920.9	919.4
15°	900.5	903.2	904.5	904.5	903.2	905.9	910.0	904.5	905.9	899.1	901.8
17.5°	886.9	881.5	885.5	882.8	884.2	886.9	892.3	892.3	884.2	882.8	885.5
20°	855.7	871.9	873.4	865.2	866.6	866.6	876.0	867.9	873.4	866.6	869.2
22.5°	840.7	851.6	852.9	842.0	848.9	840.7	850.2	838.0	851.6	842.0	846.1
25°	821.7	820.4	824.4	818.9	820.4	820.4	827.1	821.7	825.8	820.4	821.7
27.5°	790.5	801.4	799.9	794.5	797.3	796.0	809.5	794.5	802.7	796.0	798.6
30°	763.3	772.8	770.1	764.6	764.6	760.6	775.5	771.4	770.1	770.1	768.7
32.5°	736.1	737.5	734.8	736.1	737.5	732.1	744.3	738.8	737.5	738.8	740.2
35°	699.4	699.4	702.2	698.1	703.5	703.5	714.4	707.6	706.2	702.2	706.2
37.5°	666.9	662.8	664.1	664.1	666.9	669.6	675.0	672.3	672.3	668.2	670.9
40°	623.4	620.7	624.8	624.8	628.8	628.8	634.2	631.6	635.6	635.6	635.6
42.5°	585.4	585.4	582.7	586.7	588.1	586.7	596.3	594.9	596.3	593.5	594.9
45°	544.6	544.6	541.9	540.5	547.4	546.0	556.8	552.7	558.2	555.5	556.8
47.5°	489.0	495.8	491.6	495.8	503.9	505.2	512.1	509.3	514.7	510.7	516.1
50°	436.0	436.0	440.0	445.4	453.7	455.0	463.1	468.6	471.3	472.6	474.0
52.5°	380.3	378.9	383.0	389.8	396.6	402.0	410.1	418.3	423.8	431.9	427.8
55°	315.1	317.8	321.9	330.1	340.9	347.7	354.5	365.4	374.8	378.9	387.0
57.5°	259.4	256.6	259.4	270.3	282.5	288.0	297.4	308.3	321.9	330.1	332.7
60°	201.0	202.4	205.1	214.6	224.1	232.2	236.3	254.0	266.2	274.3	279.8
62.5°	148.1	150.7	153.5	161.6	171.1	177.9	184.7	199.7	210.6	218.7	224.1
65°	103.2	104.6	108.6	112.7	122.3	129.0	134.5	146.7	157.6	164.4	168.4
67.5°	63.9	65.2	67.8	73.3	80.2	85.5	91.0	99.2	108.6	115.5	116.8
70°	32.6	34.0	35.3	39.4	44.9	47.5	51.6	58.4	65.2	70.6	73.3
72.5°	10.9	10.9	12.2	15.0	17.7	20.3	21.8	28.6	34.0	36.7	38.0
75°	2.7	2.7	2.7	2.7	2.7	4.1	4.1	8.1	10.9	13.5	15.0
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	956.2	956.2	956.2	956.2	956.2	956.2	956.2	956.2	956.2	956.2
2.5°	956.2	953.4	952.1	953.4	953.4	952.1	956.2	961.6	968.4	950.8
5°	954.7	952.1	954.7	946.6	950.8	948.0	953.4	952.1	957.5	952.1
7.5°	950.8	945.3	946.6	942.6	948.0	941.2	945.3	953.4	948.0	939.9
10°	937.1	934.5	944.0	930.3	927.7	933.1	944.0	935.8	933.1	935.8
12.5°	923.5	923.5	927.7	916.8	918.1	920.9	926.3	920.9	923.5	930.3
15°	908.7	905.9	912.6	904.5	903.2	900.5	905.9	905.9	908.7	904.5
17.5°	891.0	886.9	886.9	884.2	882.8	889.6	892.3	893.7	895.0	889.6
20°	869.2	867.9	871.9	867.9	869.2	870.6	870.6	867.9	880.1	865.2
22.5°	846.1	850.2	844.8	842.0	844.8	847.5	847.5	848.9	846.1	843.4
25°	823.1	825.8	827.1	818.9	823.1	818.9	828.5	829.8	824.4	827.1
27.5°	802.7	798.6	797.3	791.8	794.5	793.2	794.5	794.5	802.7	791.8
30°	771.4	767.4	768.7	764.6	766.0	764.6	766.0	766.0	771.4	770.1
32.5°	741.5	737.5	738.8	734.8	734.8	736.1	733.4	733.4	737.5	734.8
35°	713.1	703.5	704.9	703.5	704.9	699.4	699.4	698.1	700.9	694.0
37.5°	672.3	668.2	666.9	665.6	666.9	664.1	666.9	662.8	666.9	661.4
40°	635.6	632.9	634.2	626.1	626.1	627.4	624.8	623.4	624.8	630.2
42.5°	598.9	593.5	590.8	588.1	589.5	585.4	584.0	581.3	584.0	578.6
45°	555.5	555.5	554.2	547.4	548.7	548.7	543.3	537.9	539.2	539.2
47.5°	516.1	513.4	512.1	505.2	503.9	502.6	497.1	493.0	493.0	489.0
50°	472.6	469.9	465.9	459.1	456.3	448.2	444.1	438.7	433.3	433.3
52.5°	431.9	422.3	417.0	406.1	402.0	397.9	387.0	383.0	378.9	374.8
55°	383.0	374.8	364.1	351.7	346.4	339.5	328.7	320.5	315.1	316.5
57.5°	335.5	321.9	311.1	294.8	288.0	283.8	273.0	262.1	256.6	256.6
60°	277.1	266.2	252.7	237.7	232.2	225.5	211.9	205.1	201.0	196.9
62.5°	221.3	213.2	201.0	182.0	177.9	171.1	161.6	153.5	149.4	149.4
65°	165.7	157.6	146.7	133.2	127.7	122.3	114.1	106.0	101.8	100.5
67.5°	116.8	107.3	97.9	87.0	82.8	80.2	72.0	66.5	63.9	62.5
70°	70.6	65.2	58.4	50.2	46.2	43.4	38.0	34.0	32.6	31.2
72.5°	36.7	32.6	27.2	21.8	19.0	16.3	13.5	10.9	9.6	9.6
75°	13.5	10.9	6.8	4.1	2.7	2.7	2.7	2.7	2.7	2.7
77.5°	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	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)