

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: P563777

Luminaire Tested: **LD4C10D010 EX4C10D2W 4LBCSSQMMS**

Issue Date: 5/25/2022



Test Information

Test Method: LM-79-08
Report Number: P563777
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: LD4C10D010 EX4C10D2W 4LBCSSQMMS
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBCSSQ TRIM WITH MMS FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

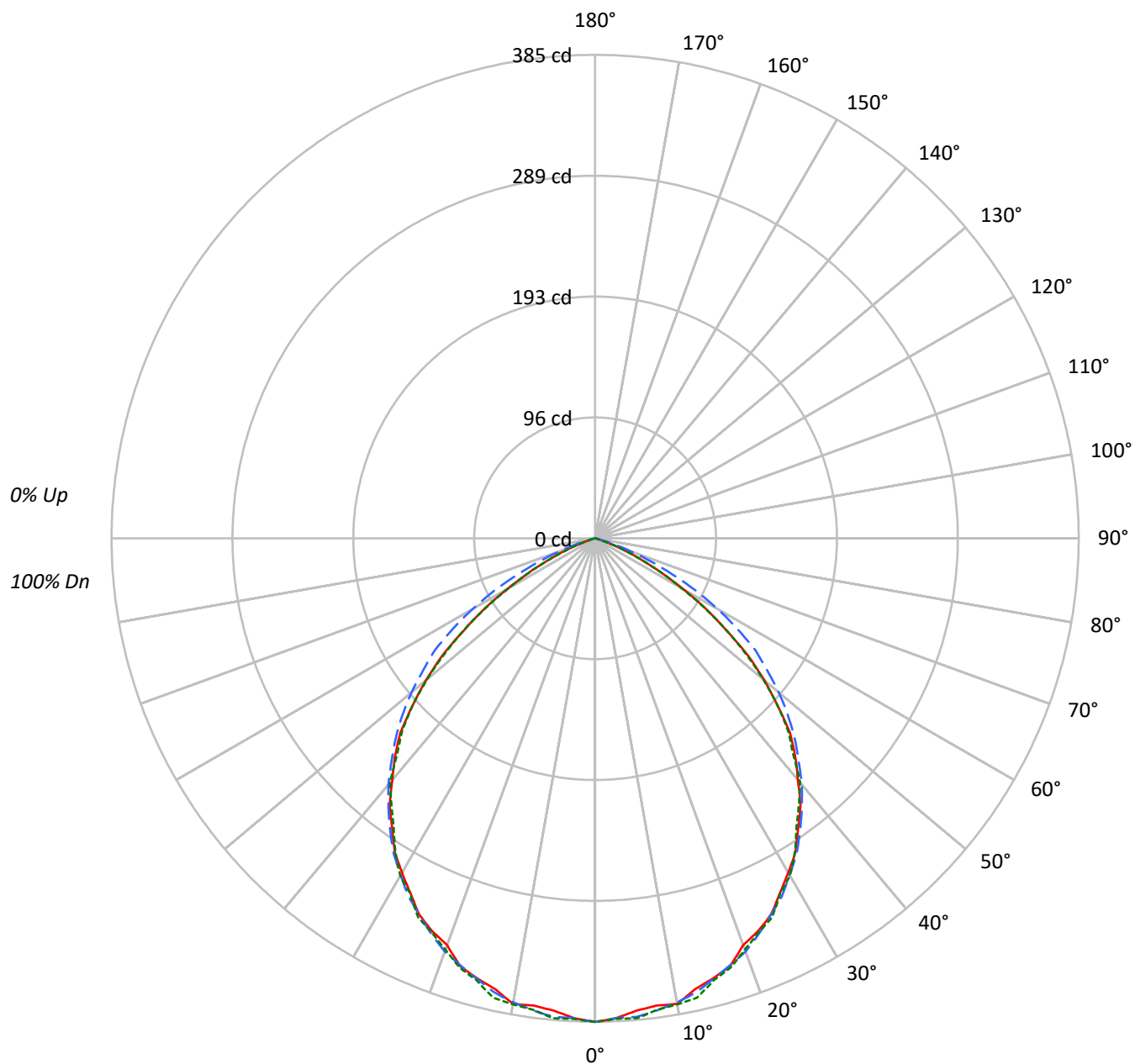
Lumens per Lamp: N/A
Luminaire Lumens: 822.9 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.8
Input Voltage (V):
Input Current (Ain): 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	34		
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°	37168	37168	37168
5°	36573	37048	37155
10°	36888	36771	36937
15°	36241	36291	36411
20°	35394	35959	35795
25°	35239	35239	35474
30°	34260	34505	34561
35°	33194	33512	32934
40°	31628	32245	31981
45°	29938	30621	29652
50°	26374	28656	26209
55°	21348	26226	21448
60°	15631	21749	15303
65°	9498	15480	9247
70°	3696	8351	3555
75°	410	2237	410
80°	278	278	278
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	4.4
10°-20°	102.9	12.5
20°-30°	152.7	18.6
30°-40°	176.9	21.5
40°-50°	169.6	20.6
50°-60°	124.7	15.2
60°-70°	53.9	6.5
70°-80°	5.8	0.7
80°-90°	0.1	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°	291.9	35.5
0°-40°	468.8	57.0
0°-60°	763.2	92.7
0°-90°	822.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	822.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	385	385	385	385	385	
5°	378	381	382	383	384	36
15°	363	365	363	364	364	102
25°	331	330	331	332	333	152
35°	282	284	284	284	280	176
45°	219	220	224	221	217	167
55°	127	140	156	140	128	114
65°	42	52	68	52	40	43
75°	1	2	6	1	1	3
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°	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2
2.5°	382.5	386.8	387.5	384.7	383.6	382.0	385.7	383.1	384.1	383.1	382.5
5°	377.6	382.5	383.1	383.1	382.0	381.3	383.1	382.5	382.0	380.8	382.5
7.5°	375.3	378.1	380.8	377.6	379.2	378.7	382.5	380.8	380.3	380.3	379.2
10°	376.5	376.0	378.1	374.8	376.0	374.8	378.1	378.1	377.0	376.0	375.3
12.5°	367.7	372.1	372.1	371.6	370.5	368.8	372.1	374.3	371.0	371.0	370.5
15°	362.8	363.9	364.5	364.5	363.9	365.0	366.6	364.5	365.0	362.2	363.3
17.5°	357.3	355.1	356.7	355.7	356.2	357.3	359.5	359.5	356.2	355.7	356.7
20°	344.7	351.3	351.8	348.6	349.1	349.1	353.0	349.7	351.8	349.1	350.2
22.5°	338.7	343.1	343.6	339.2	342.0	338.7	342.6	337.6	343.1	339.2	340.9
25°	331.0	330.5	332.1	330.0	330.5	330.5	333.2	331.0	332.7	330.5	331.0
27.5°	318.5	322.9	322.2	320.1	321.2	320.6	326.1	320.1	323.4	320.6	321.7
30°	307.5	311.4	310.2	308.1	308.1	306.4	312.5	310.8	310.2	310.2	309.7
32.5°	296.6	297.1	296.0	296.6	297.1	295.0	299.9	297.6	297.1	297.6	298.2
35°	281.8	281.8	282.9	281.3	283.5	283.5	287.9	285.1	284.5	282.9	284.5
37.5°	268.6	267.0	267.6	267.6	268.6	269.8	272.0	270.9	270.9	269.3	270.3
40°	251.1	250.0	251.7	251.7	253.4	253.4	255.5	254.4	256.0	256.0	256.0
42.5°	235.9	235.9	234.8	236.4	236.9	236.4	240.3	239.7	240.3	239.1	239.7
45°	219.4	219.4	218.3	217.8	220.5	220.0	224.4	222.7	224.9	223.8	224.4
47.5°	197.0	199.7	198.0	199.7	203.0	203.5	206.3	205.2	207.4	205.8	207.9
50°	175.7	175.7	177.3	179.4	182.8	183.3	186.6	188.8	189.9	190.4	190.9
52.5°	153.2	152.7	154.3	157.1	159.8	161.9	165.3	168.6	170.7	174.0	172.3
55°	126.9	128.1	129.7	132.9	137.3	140.1	142.8	147.2	151.1	152.7	155.9
57.5°	104.5	103.4	104.5	108.8	113.8	116.0	119.8	124.2	129.7	132.9	134.1
60°	81.0	81.6	82.6	86.5	90.3	93.6	95.2	102.3	107.2	110.6	112.7
62.5°	59.6	60.7	61.8	65.1	69.0	71.7	74.5	80.5	84.8	88.1	90.3
65°	41.6	42.1	43.7	45.4	49.2	52.0	54.1	59.1	63.5	66.2	67.8
67.5°	25.7	26.2	27.4	29.6	32.2	34.5	36.6	40.0	43.7	46.5	47.1
70°	13.1	13.7	14.2	15.9	18.1	19.1	20.8	23.5	26.2	28.5	29.6
72.5°	4.4	4.4	5.0	6.0	7.1	8.2	8.7	11.5	13.7	14.7	15.4
75°	1.1	1.1	1.1	1.1	1.1	1.6	1.6	3.3	4.4	5.5	6.0
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2	385.2
2.5°	385.2	384.1	383.6	384.1	384.1	383.6	385.2	387.5	390.1	383.1
5°	384.7	383.6	384.7	381.3	383.1	382.0	384.1	383.6	385.7	383.6
7.5°	383.1	380.8	381.3	379.7	382.0	379.2	380.8	384.1	382.0	378.7
10°	377.6	376.5	380.3	374.8	373.7	376.0	380.3	377.0	376.0	377.0
12.5°	372.1	372.1	373.7	369.3	369.9	371.0	373.2	371.0	372.1	374.8
15°	366.1	365.0	367.7	364.5	363.9	362.8	365.0	365.0	366.1	364.5
17.5°	359.0	357.3	357.3	356.2	355.7	358.5	359.5	360.1	360.6	358.5
20°	350.2	349.7	351.3	349.7	350.2	350.7	350.7	349.7	354.6	348.6
22.5°	340.9	342.6	340.4	339.2	340.4	341.5	341.5	342.0	340.9	339.8
25°	331.6	332.7	333.2	330.0	331.6	330.0	333.7	334.4	332.1	333.2
27.5°	323.4	321.7	321.2	319.0	320.1	319.6	320.1	320.1	323.4	319.0
30°	310.8	309.1	309.7	308.1	308.6	308.1	308.6	308.6	310.8	310.2
32.5°	298.8	297.1	297.6	296.0	296.0	296.6	295.5	295.5	297.1	296.0
35°	287.3	283.5	284.0	283.5	284.0	281.8	281.8	281.3	282.4	279.6
37.5°	270.9	269.3	268.6	268.1	268.6	267.6	268.6	267.0	268.6	266.5
40°	256.0	255.0	255.5	252.3	252.3	252.8	251.7	251.1	251.7	253.9
42.5°	241.3	239.1	238.0	236.9	237.5	235.9	235.3	234.2	235.3	233.1
45°	223.8	223.8	223.3	220.5	221.0	221.0	218.9	216.7	217.3	217.3
47.5°	207.9	206.9	206.3	203.5	203.0	202.4	200.3	198.7	198.7	197.0
50°	190.4	189.3	187.7	184.9	183.8	180.6	178.9	176.8	174.6	174.6
52.5°	174.0	170.2	167.9	163.6	161.9	160.3	155.9	154.3	152.7	151.1
55°	154.3	151.1	146.7	141.7	139.6	136.8	132.4	129.1	126.9	127.5
57.5°	135.2	129.7	125.3	118.7	116.0	114.3	110.0	105.6	103.4	103.4
60°	111.6	107.2	101.8	95.7	93.6	90.8	85.3	82.6	81.0	79.3
62.5°	89.2	86.0	81.0	73.3	71.7	69.0	65.1	61.8	60.2	60.2
65°	66.7	63.5	59.1	53.6	51.5	49.2	46.0	42.7	41.0	40.5
67.5°	47.1	43.2	39.4	35.0	33.4	32.2	29.0	26.9	25.7	25.1
70°	28.5	26.2	23.5	20.2	18.6	17.5	15.4	13.7	13.1	12.6
72.5°	14.7	13.1	11.0	8.7	7.6	6.6	5.5	4.4	3.9	3.9
75°	5.5	4.4	2.7	1.6	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)