

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: P563850

Luminaire Tested: **LD4C05D010 EX4C05D2W 4LBCSSQMW**

Issue Date: 5/25/2022

Test Information

Test Method: LM-79-08
Report Number: P563850
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: LD4C05D010 EX4C05D2W 4LBCSSQMW
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MW FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

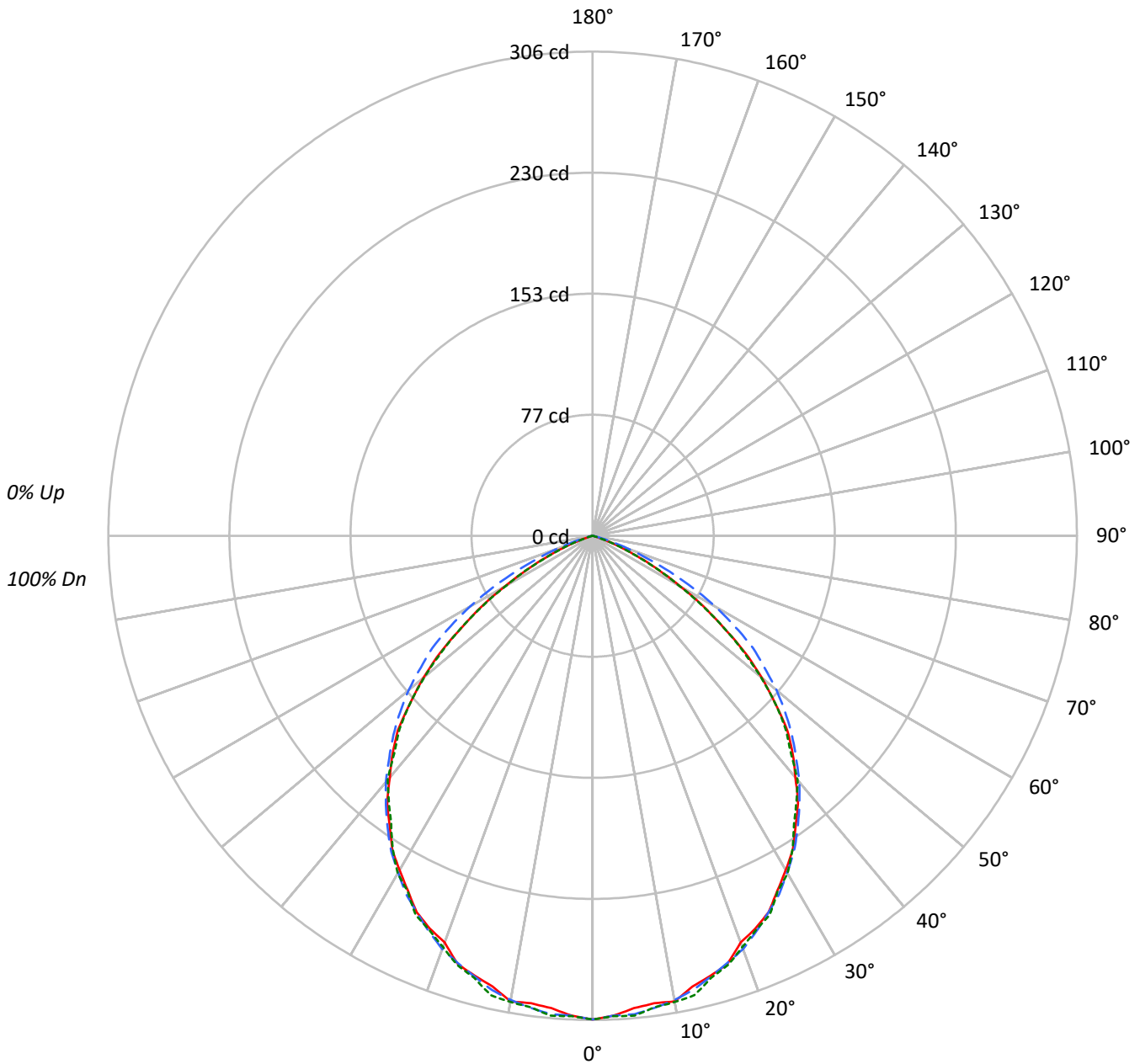
Lumens per Lamp: N/A
Luminaire Lumens: 653.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
Input Voltage (V):
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	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°	29497	29497	29497
5°	29028	29396	29483
10°	29276	29187	29315
15°	28759	28809	28889
20°	28083	28535	28402
25°	27968	27968	28160
30°	27185	27386	27442
35°	26338	26597	26138
40°	25103	25595	25380
45°	23757	24289	23525
50°	20925	22757	20790
55°	16940	20826	17024
60°	12408	17252	12158
65°	7534	12283	7329
70°	2934	6630	2821
75°	336	1789	336
80°	222	222	222
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	4.4
10°-20°	81.7	12.5
20°-30°	121.2	18.6
30°-40°	140.4	21.5
40°-50°	134.6	20.6
50°-60°	99.0	15.2
60°-70°	42.7	6.5
70°-80°	4.6	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°	231.7	35.5
0°-40°	372.1	57.0
0°-60°	605.6	92.7
0°-90°	653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	653.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	300	303	304	304	304	29
15°	288	290	288	289	289	81
25°	263	262	263	263	264	120
35°	224	225	226	225	222	140
45°	174	175	178	176	172	132
55°	101	111	124	111	101	91
65°	33	41	54	41	32	34
75°	1	1	5	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°	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7
2.5°	303.5	307.0	307.4	305.3	304.4	303.1	306.2	303.9	304.9	303.9	303.5
5°	299.7	303.5	303.9	303.9	303.1	302.6	303.9	303.5	303.1	302.2	303.5
7.5°	297.9	300.1	302.2	299.7	300.9	300.5	303.5	302.2	301.8	301.8	300.9
10°	298.8	298.3	300.1	297.4	298.3	297.4	300.1	300.1	299.2	298.3	297.9
12.5°	291.8	295.3	295.3	294.9	294.0	292.6	295.3	297.0	294.4	294.4	294.0
15°	287.9	288.8	289.2	289.2	288.8	289.6	290.9	289.2	289.6	287.5	288.4
17.5°	283.6	281.9	283.1	282.3	282.7	283.6	285.3	285.3	282.7	282.3	283.1
20°	273.5	278.8	279.2	276.6	277.1	277.1	280.1	277.5	279.2	277.1	277.9
22.5°	268.7	272.3	272.7	269.3	271.4	268.7	271.8	267.9	272.3	269.3	270.5
25°	262.7	262.2	263.6	261.8	262.2	262.2	264.5	262.7	264.1	262.2	262.7
27.5°	252.8	256.2	255.7	254.0	254.9	254.5	258.8	254.0	256.6	254.5	255.3
30°	244.0	247.1	246.3	244.4	244.4	243.2	248.0	246.7	246.3	246.3	245.8
32.5°	235.4	235.8	235.0	235.4	235.8	234.1	237.9	236.2	235.8	236.2	236.7
35°	223.6	223.6	224.5	223.2	224.9	224.9	228.4	226.2	225.8	224.5	225.8
37.5°	213.2	211.9	212.3	212.3	213.2	214.1	215.8	214.9	214.9	213.6	214.5
40°	199.3	198.5	199.8	199.8	201.1	201.1	202.8	201.9	203.2	203.2	203.2
42.5°	187.2	187.2	186.2	187.6	188.1	187.6	190.6	190.2	190.6	189.8	190.2
45°	174.1	174.1	173.2	172.8	175.0	174.6	178.0	176.7	178.4	177.6	178.0
47.5°	156.3	158.5	157.2	158.5	161.1	161.5	163.7	162.9	164.6	163.3	165.0
50°	139.4	139.4	140.7	142.4	145.1	145.5	148.1	149.8	150.6	151.2	151.6
52.5°	121.6	121.1	122.5	124.6	126.8	128.6	131.1	133.8	135.5	138.1	136.8
55°	100.7	101.6	102.9	105.5	109.0	111.2	113.3	116.8	119.8	121.1	123.8
57.5°	82.9	82.1	82.9	86.4	90.3	92.1	95.1	98.6	102.9	105.5	106.4
60°	64.3	64.7	65.6	68.7	71.6	74.3	75.6	81.2	85.1	87.7	89.4
62.5°	47.3	48.2	49.0	51.7	54.7	56.9	59.1	63.9	67.3	69.9	71.6
65°	33.0	33.5	34.8	36.0	39.1	41.2	43.0	46.9	50.4	52.6	53.8
67.5°	20.4	20.9	21.7	23.5	25.6	27.4	29.1	31.7	34.8	36.9	37.3
70°	10.4	10.9	11.3	12.6	14.3	15.2	16.5	18.7	20.9	22.6	23.5
72.5°	3.5	3.5	3.9	4.8	5.7	6.5	6.9	9.2	10.9	11.7	12.1
75°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	2.6	3.5	4.4	4.8
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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°	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7
2.5°	305.7	304.9	304.4	304.9	304.9	304.4	305.7	307.4	309.6	303.9
5°	305.3	304.4	305.3	302.6	303.9	303.1	304.9	304.4	306.2	304.4
7.5°	303.9	302.2	302.6	301.4	303.1	300.9	302.2	304.9	303.1	300.5
10°	299.7	298.8	301.8	297.4	296.6	298.3	301.8	299.2	298.3	299.2
12.5°	295.3	295.3	296.6	293.2	293.6	294.4	296.1	294.4	295.3	297.4
15°	290.5	289.6	291.8	289.2	288.8	287.9	289.6	289.6	290.5	289.2
17.5°	284.8	283.6	283.6	282.7	282.3	284.4	285.3	285.7	286.1	284.4
20°	277.9	277.5	278.8	277.5	277.9	278.3	278.3	277.5	281.4	276.6
22.5°	270.5	271.8	270.1	269.3	270.1	271.0	271.0	271.4	270.5	269.7
25°	263.1	264.1	264.5	261.8	263.1	261.8	264.9	265.3	263.6	264.5
27.5°	256.6	255.3	254.9	253.2	254.0	253.6	254.0	254.0	256.6	253.2
30°	246.7	245.3	245.8	244.4	244.9	244.4	244.9	244.9	246.7	246.3
32.5°	237.1	235.8	236.2	235.0	235.0	235.4	234.5	234.5	235.8	235.0
35°	228.0	224.9	225.4	224.9	225.4	223.6	223.6	223.2	224.1	221.9
37.5°	214.9	213.6	213.2	212.8	213.2	212.3	213.2	211.9	213.2	211.5
40°	203.2	202.3	202.8	200.2	200.2	200.6	199.8	199.3	199.8	201.5
42.5°	191.5	189.8	188.9	188.1	188.5	187.2	186.8	185.8	186.8	185.0
45°	177.6	177.6	177.2	175.0	175.5	175.5	173.7	172.0	172.4	172.4
47.5°	165.0	164.2	163.7	161.5	161.1	160.7	158.9	157.7	157.7	156.3
50°	151.2	150.2	148.9	146.8	145.9	143.3	142.0	140.3	138.5	138.5
52.5°	138.1	135.1	133.4	129.8	128.6	127.3	123.8	122.5	121.1	119.8
55°	122.5	119.8	116.4	112.5	110.8	108.5	105.1	102.4	100.7	101.2
57.5°	107.2	102.9	99.5	94.2	92.1	90.7	87.3	83.8	82.1	82.1
60°	88.6	85.1	80.8	76.0	74.3	72.1	67.7	65.6	64.3	63.0
62.5°	70.8	68.2	64.3	58.2	56.9	54.7	51.7	49.0	47.8	47.8
65°	53.0	50.4	46.9	42.5	40.8	39.1	36.5	33.9	32.6	32.1
67.5°	37.3	34.3	31.2	27.8	26.4	25.6	23.0	21.3	20.4	19.9
70°	22.6	20.9	18.7	16.1	14.7	13.9	12.1	10.9	10.4	10.0
72.5°	11.7	10.4	8.6	6.9	6.1	5.2	4.4	3.5	3.1	3.1
75°	4.4	3.5	2.1	1.3	0.9	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)