

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: P840090

Luminaire Tested: **LD4C05D010 EU4059030 4LBCSSQMMS**

Issue Date: 5/25/2022

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P840090
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 EU4059030 4LBCSSQMMS
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

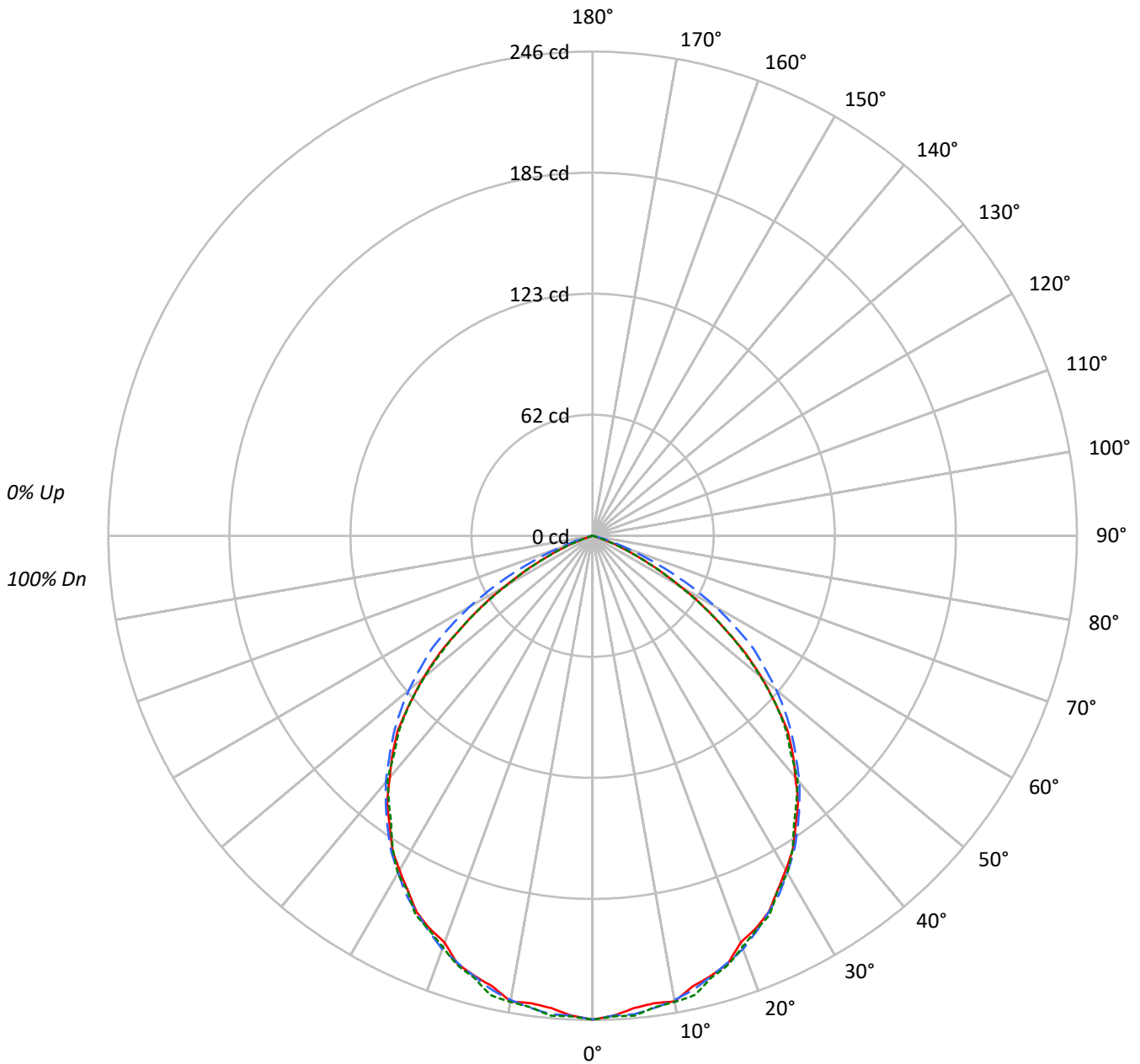
Lumens per Lamp: N/A
Luminaire Lumens: 525.0 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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					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°	23717	23717	23717
5°	23333	23633	23701
10°	23534	23466	23564
15°	23125	23155	23225
20°	22580	22939	22836
25°	22485	22485	22634
30°	21860	22016	22049
35°	21179	21379	21014
40°	20178	20581	20405
45°	19104	19527	18913
50°	16827	18283	16722
55°	13626	16738	13677
60°	9977	13875	9765
65°	6050	9886	5890
70°	2370	5332	2257
75°	261	1417	261
80°	222	222	222
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.2	4.4
10°-20°	65.6	12.5
20°-30°	97.4	18.6
30°-40°	112.9	21.5
40°-50°	108.2	20.6
50°-60°	79.6	15.2
60°-70°	34.4	6.5
70°-80°	3.7	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°	186.2	35.5
0°-40°	299.1	57.0
0°-60°	486.9	92.7
0°-90°	525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	246	246	246	246	246	
5°	241	243	244	244	245	23
15°	232	233	232	232	232	65
25°	211	211	211	212	213	97
35°	180	181	182	181	178	112
45°	140	140	143	141	139	106
55°	81	89	100	89	81	73
65°	26	33	43	33	26	27
75°	1	1	4	1	1	2
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°	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8
2.5°	244.0	246.8	247.2	245.4	244.7	243.7	246.1	244.4	245.1	244.4	244.0
5°	240.9	244.0	244.4	244.4	243.7	243.3	244.4	244.0	243.7	243.0	244.0
7.5°	239.5	241.2	243.0	240.9	241.9	241.6	244.0	243.0	242.6	242.6	241.9
10°	240.2	239.8	241.2	239.1	239.8	239.1	241.2	241.2	240.5	239.8	239.5
12.5°	234.6	237.4	237.4	237.0	236.3	235.3	237.4	238.8	236.7	236.7	236.3
15°	231.5	232.2	232.5	232.5	232.2	232.9	233.9	232.5	232.9	231.1	231.8
17.5°	228.0	226.6	227.6	226.9	227.3	228.0	229.4	229.4	227.3	226.9	227.6
20°	219.9	224.1	224.5	222.4	222.7	222.7	225.2	223.1	224.5	222.7	223.4
22.5°	216.1	218.9	219.2	216.4	218.2	216.1	218.5	215.4	218.9	216.4	217.5
25°	211.2	210.9	211.9	210.5	210.9	210.9	212.6	211.2	212.3	210.9	211.2
27.5°	203.2	206.0	205.6	204.2	204.9	204.6	208.1	204.2	206.3	204.6	205.3
30°	196.2	198.6	197.9	196.5	196.5	195.5	199.3	198.3	197.9	197.9	197.6
32.5°	189.2	189.6	188.9	189.2	189.6	188.2	191.3	189.9	189.6	189.9	190.3
35°	179.8	179.8	180.5	179.4	180.8	180.8	183.6	181.9	181.5	180.5	181.5
37.5°	171.4	170.4	170.7	170.7	171.4	172.1	173.5	172.8	172.8	171.8	172.5
40°	160.2	159.5	160.6	160.6	161.6	161.6	163.0	162.3	163.4	163.4	163.4
42.5°	150.5	150.5	149.8	150.8	151.2	150.8	153.3	152.9	153.3	152.6	152.9
45°	140.0	140.0	139.3	138.9	140.7	140.3	143.1	142.1	143.5	142.8	143.1
47.5°	125.7	127.4	126.4	127.4	129.5	129.9	131.6	130.9	132.3	131.3	132.7
50°	112.1	112.1	113.1	114.5	116.6	117.0	119.0	120.4	121.1	121.5	121.8
52.5°	97.8	97.4	98.4	100.2	101.9	103.3	105.4	107.5	108.9	111.0	110.0
55°	81.0	81.7	82.7	84.8	87.6	89.4	91.1	93.9	96.4	97.4	99.5
57.5°	66.7	66.0	66.7	69.5	72.6	74.0	76.5	79.2	82.7	84.8	85.5
60°	51.7	52.0	52.7	55.2	57.6	59.7	60.7	65.3	68.4	70.5	71.9
62.5°	38.1	38.8	39.5	41.5	44.0	45.7	47.5	51.3	54.1	56.2	57.6
65°	26.5	26.9	27.9	29.0	31.4	33.2	34.6	37.7	40.5	42.2	43.3
67.5°	16.4	16.8	17.4	18.9	20.6	22.0	23.4	25.5	27.9	29.7	30.0
70°	8.4	8.7	9.1	10.1	11.5	12.2	13.3	15.0	16.8	18.1	18.9
72.5°	2.8	2.8	3.1	3.8	4.5	5.2	5.6	7.3	8.7	9.4	9.8
75°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	2.1	2.8	3.5	3.8
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7
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°	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8
2.5°	245.8	245.1	244.7	245.1	245.1	244.7	245.8	247.2	248.9	244.4
5°	245.4	244.7	245.4	243.3	244.4	243.7	245.1	244.7	246.1	244.7
7.5°	244.4	243.0	243.3	242.3	243.7	241.9	243.0	245.1	243.7	241.6
10°	240.9	240.2	242.6	239.1	238.4	239.8	242.6	240.5	239.8	240.5
12.5°	237.4	237.4	238.4	235.6	236.0	236.7	238.1	236.7	237.4	239.1
15°	233.5	232.9	234.6	232.5	232.2	231.5	232.9	232.9	233.5	232.5
17.5°	229.0	228.0	228.0	227.3	226.9	228.7	229.4	229.7	230.1	228.7
20°	223.4	223.1	224.1	223.1	223.4	223.8	223.8	223.1	226.2	222.4
22.5°	217.5	218.5	217.1	216.4	217.1	217.8	217.8	218.2	217.5	216.8
25°	211.6	212.3	212.6	210.5	211.6	210.5	213.0	213.3	211.9	212.6
27.5°	206.3	205.3	204.9	203.5	204.2	203.9	204.2	204.2	206.3	203.5
30°	198.3	197.2	197.6	196.5	196.9	196.5	196.9	196.9	198.3	197.9
32.5°	190.6	189.6	189.9	188.9	188.9	189.2	188.5	188.5	189.6	188.9
35°	183.3	180.8	181.2	180.8	181.2	179.8	179.8	179.4	180.1	178.4
37.5°	172.8	171.8	171.4	171.1	171.4	170.7	171.4	170.4	171.4	170.0
40°	163.4	162.7	163.0	160.9	160.9	161.3	160.6	160.2	160.6	162.0
42.5°	154.0	152.6	151.9	151.2	151.5	150.5	150.1	149.4	150.1	148.7
45°	142.8	142.8	142.4	140.7	141.0	141.0	139.6	138.2	138.6	138.6
47.5°	132.7	132.0	131.6	129.9	129.5	129.2	127.8	126.7	126.7	125.7
50°	121.5	120.8	119.7	118.0	117.3	115.2	114.2	112.8	111.4	111.4
52.5°	111.0	108.6	107.2	104.4	103.3	102.3	99.5	98.4	97.4	96.4
55°	98.4	96.4	93.6	90.4	89.0	87.3	84.5	82.4	81.0	81.3
57.5°	86.2	82.7	79.9	75.8	74.0	73.0	70.2	67.4	66.0	66.0
60°	71.2	68.4	64.9	61.1	59.7	58.0	54.5	52.7	51.7	50.6
62.5°	56.9	54.8	51.7	46.8	45.7	44.0	41.5	39.5	38.4	38.4
65°	42.6	40.5	37.7	34.2	32.8	31.4	29.3	27.2	26.2	25.8
67.5°	30.0	27.6	25.1	22.3	21.3	20.6	18.5	17.1	16.4	16.1
70°	18.1	16.8	15.0	12.9	11.9	11.2	9.8	8.7	8.4	8.0
72.5°	9.4	8.4	7.0	5.6	4.9	4.2	3.5	2.8	2.4	2.4
75°	3.5	2.8	1.8	1.1	0.7	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	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)