

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: P#

Luminaire Tested: **LD4C05D010 EX4C059035 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: P#
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 EX4C059035 4LBCSSQMMS
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

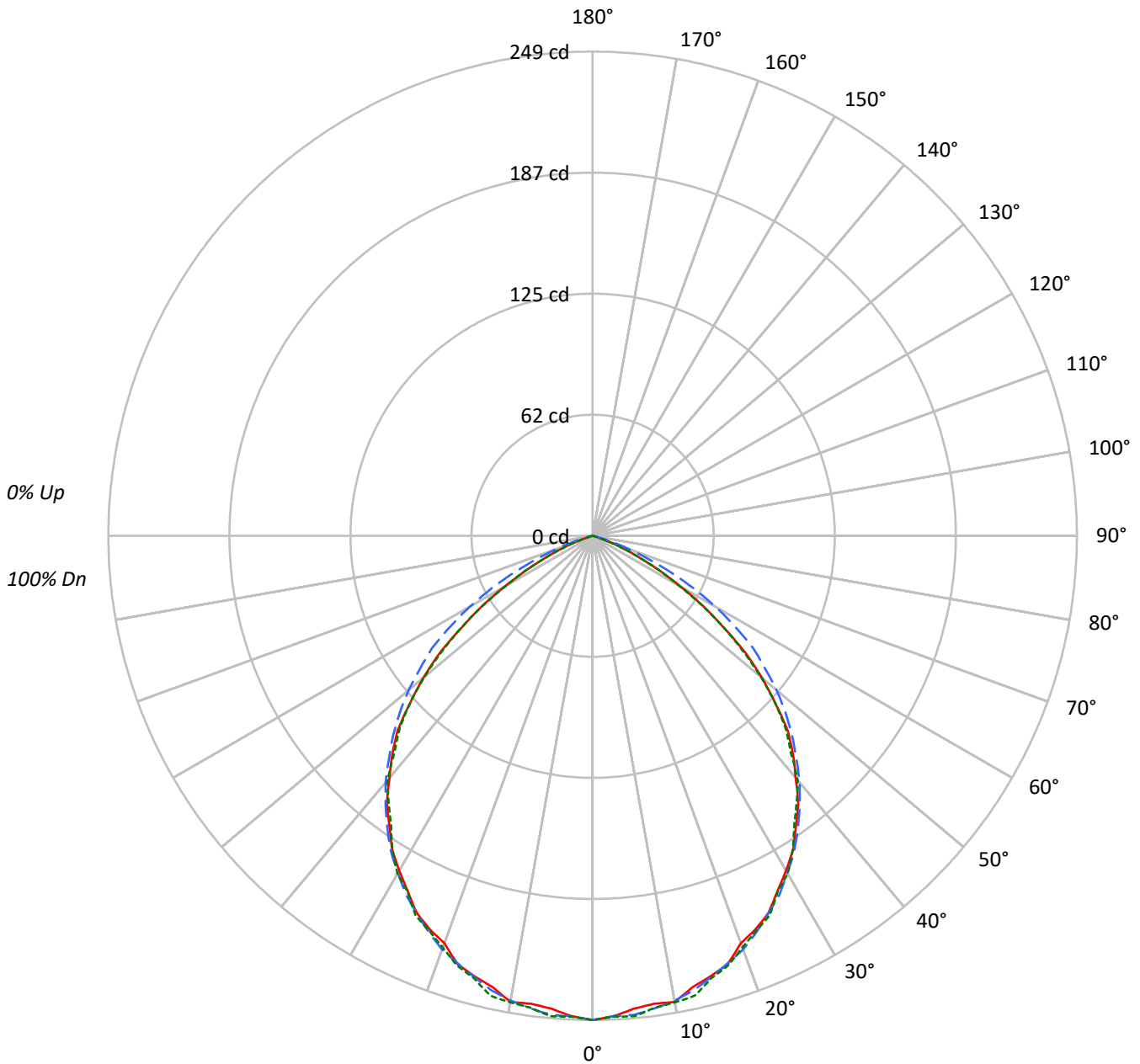
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 532.0 lumens
Efficiency: N/A
Efficacy: 73.9 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									
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°	24026	24026	24026
5°	23643	23953	24021
10°	23848	23779	23877
15°	23425	23465	23535
20°	22888	23247	23134
25°	22783	22783	22932
30°	22149	22305	22350
35°	21462	21674	21297
40°	20455	20846	20670
45°	19363	19786	19158
50°	17053	18539	16947
55°	13811	16957	13862
60°	10093	14068	9900
65°	6142	10023	5982
70°	2398	5388	2285
75°	261	1454	261
80°	222	222	222
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	4.4
10°-20°	66.5	12.5
20°-30°	98.7	18.6
30°-40°	114.4	21.5
40°-50°	109.7	20.6
50°-60°	80.6	15.2
60°-70°	34.8	6.5
70°-80°	3.8	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°	188.7	35.5
0°-40°	303.1	57.0
0°-60°	493.4	92.7
0°-90°	532.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	532.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	249	249	249	249	249	
5°	244	247	247	248	248	23
15°	234	236	235	235	236	66
25°	214	214	214	214	215	98
35°	182	183	184	184	181	114
45°	142	142	145	143	140	108
55°	82	91	101	90	82	74
65°	27	34	44	33	26	28
75°	1	1	4	1	1	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0
2.5°	247.3	250.1	250.5	248.7	248.0	246.9	249.4	247.6	248.3	247.6	247.3
5°	244.1	247.3	247.6	247.6	246.9	246.6	247.6	247.3	246.9	246.2	247.3
7.5°	242.7	244.4	246.2	244.1	245.1	244.8	247.3	246.2	245.9	245.9	245.1
10°	243.4	243.0	244.4	242.3	243.0	242.3	244.4	244.4	243.7	243.0	242.7
12.5°	237.7	240.5	240.5	240.2	239.5	238.4	240.5	242.0	239.8	239.8	239.5
15°	234.5	235.2	235.6	235.6	235.2	236.0	237.0	235.6	236.0	234.2	234.9
17.5°	231.0	229.6	230.6	229.9	230.3	231.0	232.4	232.4	230.3	229.9	230.6
20°	222.9	227.1	227.5	225.3	225.7	225.7	228.2	226.1	227.5	225.7	226.4
22.5°	219.0	221.8	222.2	219.3	221.1	219.0	221.4	218.3	221.8	219.3	220.4
25°	214.0	213.7	214.7	213.3	213.7	213.7	215.4	214.0	215.1	213.7	214.0
27.5°	205.9	208.7	208.4	206.9	207.7	207.3	210.8	206.9	209.1	207.3	208.0
30°	198.8	201.3	200.6	199.2	199.2	198.1	202.0	200.9	200.6	200.6	200.2
32.5°	191.7	192.1	191.4	191.7	192.1	190.7	193.9	192.4	192.1	192.4	192.8
35°	182.2	182.2	182.9	181.8	183.2	183.2	186.1	184.3	184.0	182.9	184.0
37.5°	173.7	172.6	173.0	173.0	173.7	174.4	175.8	175.1	175.1	174.1	174.8
40°	162.4	161.7	162.7	162.7	163.8	163.8	165.2	164.5	165.5	165.5	165.5
42.5°	152.5	152.5	151.8	152.8	153.2	152.8	155.3	154.9	155.3	154.6	154.9
45°	141.9	141.9	141.1	140.8	142.6	142.2	145.0	144.0	145.4	144.7	145.0
47.5°	127.3	129.1	128.1	129.1	131.2	131.6	133.4	132.7	134.1	133.0	134.4
50°	113.6	113.6	114.6	116.0	118.2	118.5	120.6	122.0	122.8	123.1	123.5
52.5°	99.1	98.7	99.8	101.5	103.3	104.7	106.8	109.0	110.4	112.5	111.4
55°	82.1	82.8	83.8	86.0	88.8	90.6	92.3	95.2	97.6	98.7	100.8
57.5°	67.6	66.9	67.6	70.4	73.6	75.0	77.5	80.3	83.8	86.0	86.7
60°	52.3	52.7	53.4	55.9	58.4	60.5	61.6	66.1	69.3	71.5	72.9
62.5°	38.6	39.3	40.0	42.1	44.6	46.3	48.1	52.0	54.8	57.0	58.4
65°	26.9	27.2	28.3	29.4	31.8	33.6	35.0	38.2	41.0	42.8	43.9
67.5°	16.6	17.0	17.7	19.1	20.9	22.3	23.7	25.8	28.3	30.1	30.4
70°	8.5	8.8	9.2	10.3	11.7	12.4	13.4	15.2	17.0	18.4	19.1
72.5°	2.8	2.8	3.2	3.9	4.6	5.3	5.7	7.4	8.8	9.6	9.9
75°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	2.1	2.8	3.5	3.9
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°	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0	249.0
2.5°	249.0	248.3	248.0	248.3	248.3	248.0	249.0	250.5	252.2	247.6
5°	248.7	248.0	248.7	246.6	247.6	246.9	248.3	248.0	249.4	248.0
7.5°	247.6	246.2	246.6	245.5	246.9	245.1	246.2	248.3	246.9	244.8
10°	244.1	243.4	245.9	242.3	241.6	243.0	245.9	243.7	243.0	243.7
12.5°	240.5	240.5	241.6	238.8	239.1	239.8	241.3	239.8	240.5	242.3
15°	236.7	236.0	237.7	235.6	235.2	234.5	236.0	236.0	236.7	235.6
17.5°	232.1	231.0	231.0	230.3	229.9	231.7	232.4	232.8	233.1	231.7
20°	226.4	226.1	227.1	226.1	226.4	226.8	226.8	226.1	229.2	225.3
22.5°	220.4	221.4	220.0	219.3	220.0	220.7	220.7	221.1	220.4	219.7
25°	214.4	215.1	215.4	213.3	214.4	213.3	215.8	216.1	214.7	215.4
27.5°	209.1	208.0	207.7	206.2	206.9	206.6	206.9	206.9	209.1	206.2
30°	200.9	199.9	200.2	199.2	199.5	199.2	199.5	199.5	200.9	200.6
32.5°	193.1	192.1	192.4	191.4	191.4	191.7	191.0	191.0	192.1	191.4
35°	185.7	183.2	183.6	183.2	183.6	182.2	182.2	181.8	182.5	180.8
37.5°	175.1	174.1	173.7	173.3	173.7	173.0	173.7	172.6	173.7	172.3
40°	165.5	164.8	165.2	163.1	163.1	163.4	162.7	162.4	162.7	164.1
42.5°	156.0	154.6	153.9	153.2	153.5	152.5	152.1	151.4	152.1	150.7
45°	144.7	144.7	144.3	142.6	142.9	142.9	141.5	140.1	140.4	140.4
47.5°	134.4	133.7	133.4	131.6	131.2	130.9	129.5	128.4	128.4	127.3
50°	123.1	122.4	121.3	119.6	118.9	116.7	115.7	114.3	112.9	112.9
52.5°	112.5	110.0	108.6	105.8	104.7	103.6	100.8	99.8	98.7	97.6
55°	99.8	97.6	94.8	91.6	90.2	88.4	85.6	83.5	82.1	82.4
57.5°	87.4	83.8	81.0	76.8	75.0	73.9	71.1	68.3	66.9	66.9
60°	72.2	69.3	65.8	61.9	60.5	58.7	55.2	53.4	52.3	51.3
62.5°	57.7	55.5	52.3	47.4	46.3	44.6	42.1	40.0	38.9	38.9
65°	43.2	41.0	38.2	34.7	33.3	31.8	29.7	27.6	26.5	26.2
67.5°	30.4	27.9	25.5	22.6	21.6	20.9	18.7	17.3	16.6	16.3
70°	18.4	17.0	15.2	13.1	12.0	11.3	9.9	8.8	8.5	8.1
72.5°	9.6	8.5	7.1	5.7	5.0	4.2	3.5	2.8	2.5	2.5
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)