

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: P563849

Luminaire Tested: **LD4C05D010 EX4C05D2W 4LBCSSQMMS**

Issue Date: 5/25/2022



Test Information

Test Method: LM-79-08
Report Number: P563849
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 4LBCSSQMMS
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MMS FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

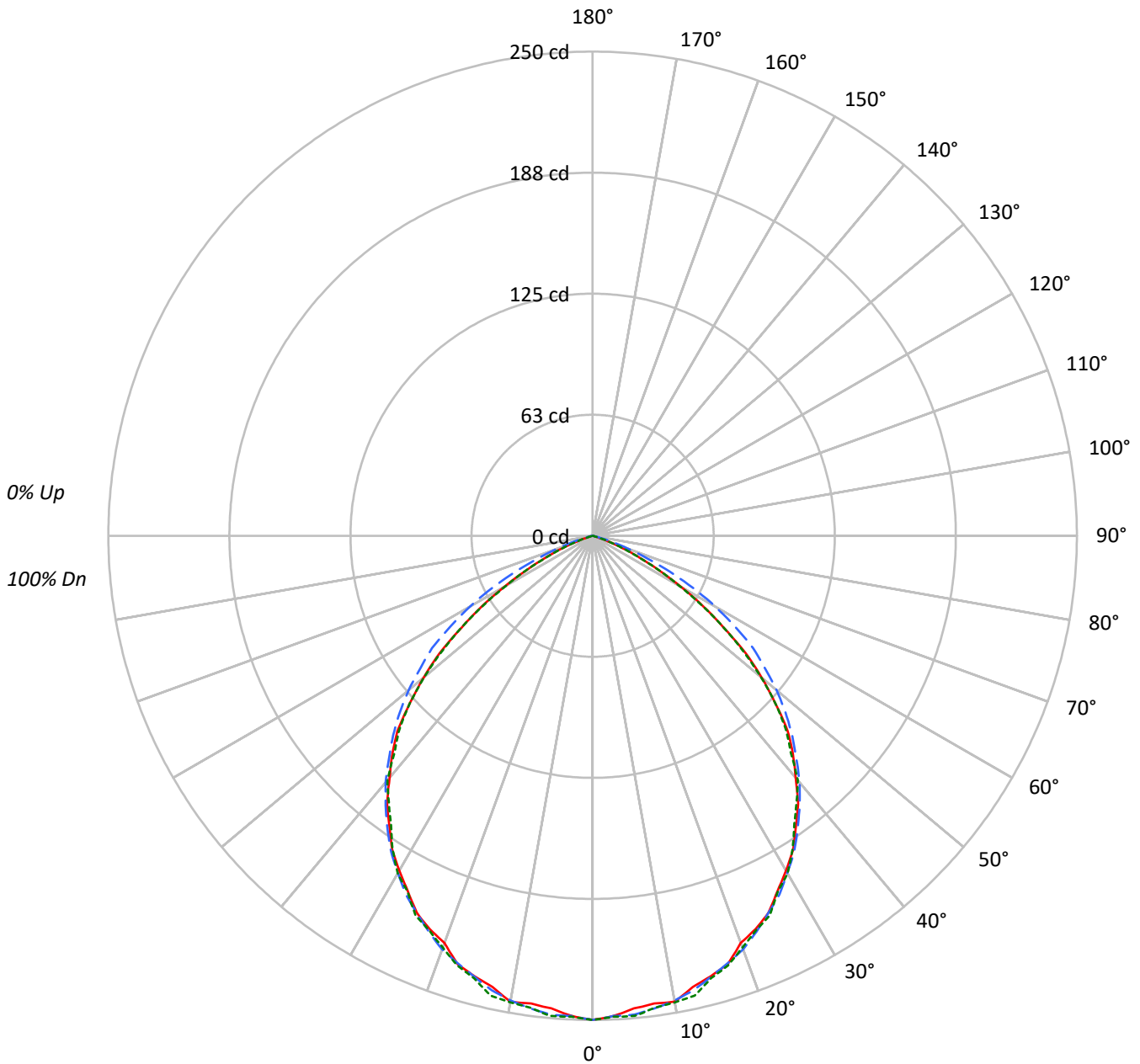
Lumens per Lamp: N/A
Luminaire Lumens: 534.1 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P563849

CATALOG NUMBER: LD4C05D010 EX4C05D2W 4LBCSSQMMS

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°	24122	24122	24122
5°	23730	24040	24108
10°	23936	23867	23965
15°	23525	23555	23625
20°	22970	23329	23227
25°	22868	22868	23028
30°	22239	22395	22428
35°	21544	21744	21379
40°	20531	20934	20758
45°	19431	19868	19240
50°	17113	18599	17007
55°	13862	17024	13912
60°	10151	14107	9938
65°	6164	10046	5982
70°	2398	5417	2285
75°	261	1454	261
80°	222	222	222
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.6	4.4
10°-20°	66.8	12.5
20°-30°	99.1	18.6
30°-40°	114.8	21.5
40°-50°	110.1	20.6
50°-60°	80.9	15.2
60°-70°	35.0	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°	189.4	35.5
0°-40°	304.3	57.0
0°-60°	495.3	92.7
0°-90°	534.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	534.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	250	250	250	250	250	
5°	245	248	248	249	249	23
15°	236	237	236	236	236	66
25°	215	214	215	215	216	98
35°	183	184	185	184	182	114
45°	142	143	146	143	141	108
55°	82	91	101	90	83	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: P563849

CATALOG NUMBER: LD4C05D010 EX4C05D2W 4LBCSSQMMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0
2.5°	248.2	251.0	251.5	249.6	248.9	247.9	250.3	248.6	249.3	248.6	248.2
5°	245.0	248.2	248.6	248.6	247.9	247.5	248.6	248.2	247.9	247.2	248.2
7.5°	243.6	245.3	247.2	245.0	246.1	245.8	248.2	247.2	246.8	246.8	246.1
10°	244.3	243.9	245.3	243.2	243.9	243.2	245.3	245.3	244.6	243.9	243.6
12.5°	238.6	241.5	241.5	241.1	240.4	239.3	241.5	242.9	240.8	240.8	240.4
15°	235.5	236.2	236.5	236.5	236.2	236.9	237.9	236.5	236.9	235.1	235.8
17.5°	231.9	230.5	231.5	230.8	231.2	231.9	233.3	233.3	231.2	230.8	231.5
20°	223.7	228.0	228.4	226.2	226.5	226.5	229.1	226.9	228.4	226.5	227.2
22.5°	219.8	222.7	223.0	220.1	222.0	219.8	222.3	219.1	222.7	220.1	221.2
25°	214.8	214.5	215.5	214.1	214.5	214.5	216.3	214.8	216.0	214.5	214.8
27.5°	206.7	209.5	209.1	207.7	208.4	208.1	211.7	207.7	209.8	208.1	208.8
30°	199.6	202.0	201.3	199.9	199.9	198.9	202.7	201.7	201.3	201.3	201.0
32.5°	192.5	192.9	192.1	192.5	192.9	191.4	194.6	193.2	192.9	193.2	193.6
35°	182.9	182.9	183.6	182.5	183.9	183.9	186.8	185.0	184.6	183.6	184.6
37.5°	174.3	173.3	173.6	173.6	174.3	175.1	176.5	175.8	175.8	174.8	175.5
40°	163.0	162.2	163.4	163.4	164.4	164.4	165.8	165.1	166.2	166.2	166.2
42.5°	153.1	153.1	152.4	153.4	153.8	153.4	155.9	155.5	155.9	155.2	155.5
45°	142.4	142.4	141.7	141.3	143.1	142.7	145.6	144.5	146.0	145.3	145.6
47.5°	127.9	129.6	128.6	129.6	131.7	132.1	133.9	133.2	134.6	133.6	135.0
50°	114.0	114.0	115.0	116.5	118.6	119.0	121.0	122.5	123.2	123.6	123.9
52.5°	99.5	99.1	100.1	101.9	103.7	105.1	107.2	109.3	110.8	112.9	111.9
55°	82.4	83.1	84.1	86.3	89.1	90.9	92.7	95.5	98.1	99.1	101.2
57.5°	67.8	67.1	67.8	70.7	73.8	75.3	77.8	80.6	84.1	86.3	87.0
60°	52.6	52.9	53.6	56.1	58.6	60.7	61.7	66.4	69.6	71.7	73.1
62.5°	38.8	39.5	40.2	42.2	44.8	46.5	48.3	52.2	55.0	57.2	58.6
65°	27.0	27.4	28.4	29.5	31.9	33.8	35.2	38.3	41.2	42.9	44.0
67.5°	16.7	17.1	17.7	19.2	21.0	22.4	23.8	25.9	28.4	30.2	30.5
70°	8.5	8.8	9.3	10.3	11.7	12.4	13.5	15.3	17.1	18.4	19.2
72.5°	2.8	2.8	3.2	3.9	4.6	5.3	5.7	7.4	8.8	9.6	10.0
75°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	2.1	2.8	3.6	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



TEST NUMBER: P563849

CATALOG NUMBER: LD4C05D010 EX4C05D2W 4LBCSSQMMS

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0
2.5°	250.0	249.3	248.9	249.3	249.3	248.9	250.0	251.5	253.2	248.6
5°	249.6	248.9	249.6	247.5	248.6	247.9	249.3	248.9	250.3	248.9
7.5°	248.6	247.2	247.5	246.5	247.9	246.1	247.2	249.3	247.9	245.8
10°	245.0	244.3	246.8	243.2	242.5	243.9	246.8	244.6	243.9	244.6
12.5°	241.5	241.5	242.5	239.7	240.1	240.8	242.2	240.8	241.5	243.2
15°	237.5	236.9	238.6	236.5	236.2	235.5	236.9	236.9	237.5	236.5
17.5°	232.9	231.9	231.9	231.2	230.8	232.6	233.3	233.7	234.1	232.6
20°	227.2	226.9	228.0	226.9	227.2	227.6	227.6	226.9	230.1	226.2
22.5°	221.2	222.3	220.8	220.1	220.8	221.5	221.5	222.0	221.2	220.5
25°	215.2	216.0	216.3	214.1	215.2	214.1	216.7	217.0	215.5	216.3
27.5°	209.8	208.8	208.4	207.0	207.7	207.4	207.7	207.7	209.8	207.0
30°	201.7	200.6	201.0	199.9	200.3	199.9	200.3	200.3	201.7	201.3
32.5°	193.9	192.9	193.2	192.1	192.1	192.5	191.7	191.7	192.9	192.1
35°	186.5	183.9	184.3	183.9	184.3	182.9	182.9	182.5	183.2	181.5
37.5°	175.8	174.8	174.3	174.0	174.3	173.6	174.3	173.3	174.3	172.9
40°	166.2	165.5	165.8	163.7	163.7	164.1	163.4	163.0	163.4	164.8
42.5°	156.6	155.2	154.5	153.8	154.1	153.1	152.7	152.0	152.7	151.3
45°	145.3	145.3	144.8	143.1	143.4	143.4	142.0	140.6	141.0	141.0
47.5°	135.0	134.3	133.9	132.1	131.7	131.4	130.0	128.9	128.9	127.9
50°	123.6	122.9	121.8	120.0	119.3	117.2	116.2	114.7	113.3	113.3
52.5°	112.9	110.5	109.0	106.2	105.1	104.1	101.2	100.1	99.1	98.1
55°	100.1	98.1	95.2	92.0	90.5	88.8	86.0	83.8	82.4	82.7
57.5°	87.7	84.1	81.3	77.1	75.3	74.3	71.4	68.6	67.1	67.1
60°	72.4	69.6	66.0	62.2	60.7	59.0	55.4	53.6	52.6	51.5
62.5°	57.9	55.7	52.6	47.6	46.5	44.8	42.2	40.2	39.1	39.1
65°	43.3	41.2	38.3	34.8	33.4	31.9	29.8	27.7	26.7	26.2
67.5°	30.5	28.1	25.5	22.7	21.7	21.0	18.8	17.4	16.7	16.4
70°	18.4	17.1	15.3	13.1	12.1	11.4	10.0	8.8	8.5	8.1
72.5°	9.6	8.5	7.1	5.7	5.0	4.3	3.6	2.8	2.4	2.4
75°	3.6	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)