

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 EX4C059050 4LBCSSQMMS**

Issue Date: 5/25/2022



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 EX4C059050 4LBCSSQMMS
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS AND 4LBCSSQ TRIM WITH MMS FINISH
Light Source: -
Ballast/Driver: -

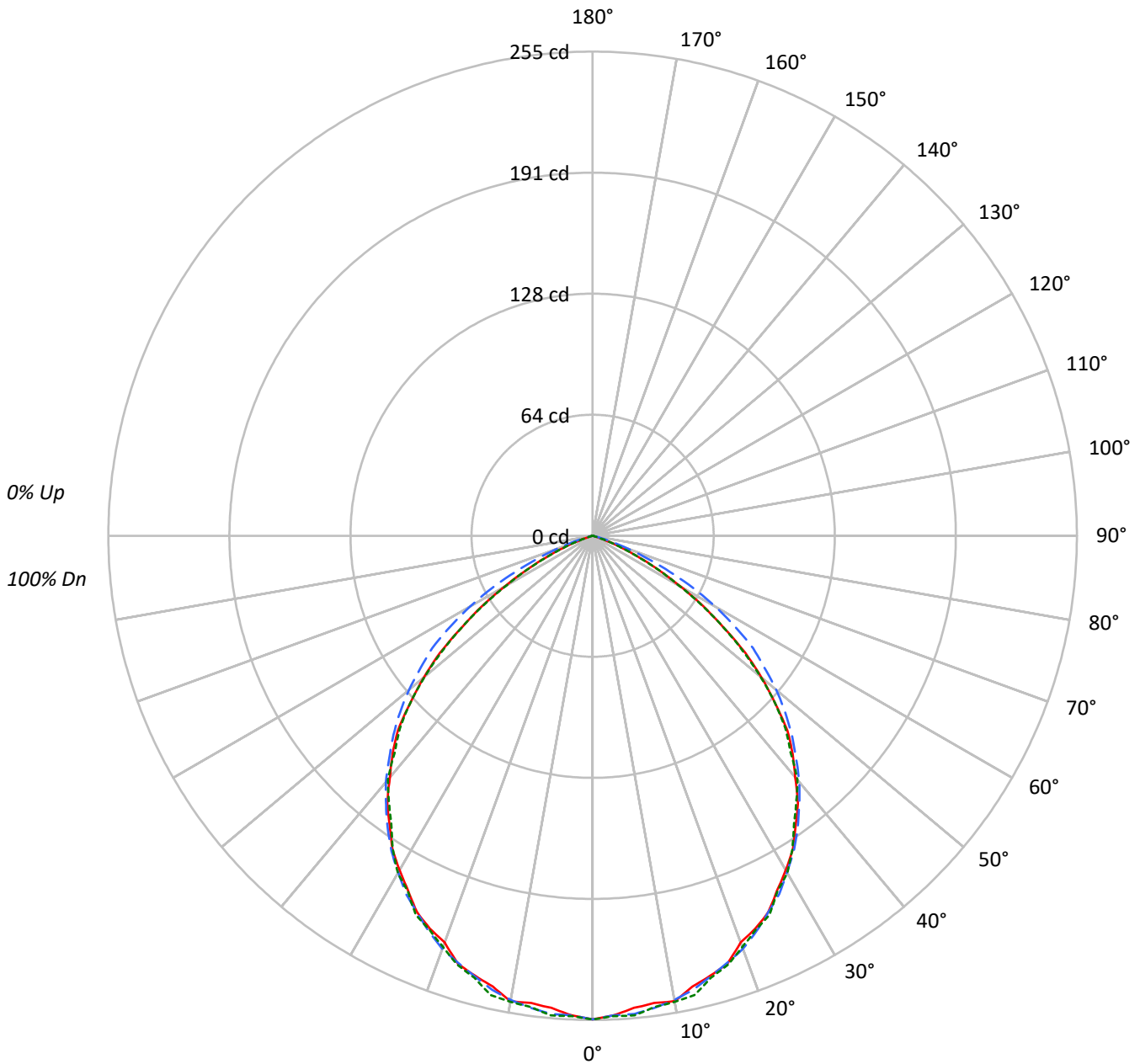
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 544.0 lumens
Efficiency: N/A
Efficacy: 75.6 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 (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

TEST NUMBER: P#
CATALOG NUMBER: LD4C05D010 EX4C059050 4LBCSSQMMS

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C05D010 EX4C059050 4LBCSSQMMS

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°	24576	24576	24576
5°	24176	24486	24563
10°	24387	24318	24416
15°	23954	23994	24064
20°	23401	23771	23658
25°	23294	23294	23454
30°	22651	22807	22851
35°	21944	22157	21768
40°	20909	21325	21136
45°	19786	20236	19595
50°	17428	18944	17323
55°	14114	17344	14181
60°	10324	14377	10131
65°	6279	10251	6119
70°	2454	5501	2342
75°	261	1491	261
80°	222	222	222
85°	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: LD4C05D010 EX4C059050 4LBCSSQMMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	4.4
10°-20°	68.0	12.5
20°-30°	100.9	18.6
30°-40°	116.9	21.5
40°-50°	112.1	20.6
50°-60°	82.4	15.2
60°-70°	35.6	6.5
70°-80°	3.9	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°	193.0	35.5
0°-40°	309.9	57.0
0°-60°	504.5	92.7
0°-90°	544.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	544.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	255	255	255	255	255	
5°	250	252	253	253	254	24
15°	240	241	240	241	241	68
25°	219	218	219	219	220	100
35°	186	187	188	188	185	116
45°	145	145	148	146	144	110
55°	84	93	103	92	84	76
65°	28	34	45	34	27	28
75°	1	1	4	1	1	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: LD4C05D010 EX4C059050 4LBCSSQMMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7
2.5°	252.8	255.7	256.1	254.3	253.6	252.5	255.0	253.2	253.9	253.2	252.8
5°	249.6	252.8	253.2	253.2	252.5	252.1	253.2	252.8	252.5	251.8	252.8
7.5°	248.2	250.0	251.8	249.6	250.7	250.3	252.8	251.8	251.4	251.4	250.7
10°	248.9	248.5	250.0	247.8	248.5	247.8	250.0	250.0	249.2	248.5	248.2
12.5°	243.1	246.0	246.0	245.6	244.9	243.8	246.0	247.4	245.2	245.2	244.9
15°	239.8	240.6	240.9	240.9	240.6	241.3	242.4	240.9	241.3	239.5	240.2
17.5°	236.2	234.8	235.8	235.1	235.5	236.2	237.7	237.7	235.5	235.1	235.8
20°	227.9	232.2	232.6	230.4	230.8	230.8	233.3	231.2	232.6	230.8	231.5
22.5°	223.9	226.8	227.2	224.3	226.1	223.9	226.4	223.2	226.8	224.3	225.4
25°	218.8	218.5	219.6	218.1	218.5	218.5	220.3	218.8	219.9	218.5	218.8
27.5°	210.5	213.4	213.1	211.6	212.3	212.0	215.6	211.6	213.8	212.0	212.7
30°	203.3	205.8	205.1	203.7	203.7	202.6	206.5	205.5	205.1	205.1	204.7
32.5°	196.1	196.4	195.7	196.1	196.4	195.0	198.2	196.8	196.4	196.8	197.1
35°	186.3	186.3	187.0	185.9	187.4	187.4	190.3	188.5	188.1	187.0	188.1
37.5°	177.6	176.5	176.9	176.9	177.6	178.3	179.8	179.1	179.1	178.0	178.7
40°	166.0	165.3	166.4	166.4	167.5	167.5	168.9	168.2	169.3	169.3	169.3
42.5°	155.9	155.9	155.2	156.3	156.6	156.3	158.8	158.4	158.8	158.1	158.4
45°	145.0	145.0	144.3	144.0	145.8	145.4	148.3	147.2	148.7	147.9	148.3
47.5°	130.2	132.0	130.9	132.0	134.2	134.6	136.4	135.6	137.1	136.0	137.5
50°	116.1	116.1	117.2	118.6	120.8	121.2	123.4	124.8	125.5	125.9	126.2
52.5°	101.3	100.9	102.0	103.8	105.6	107.1	109.2	111.4	112.9	115.0	113.9
55°	83.9	84.6	85.7	87.9	90.8	92.6	94.4	97.3	99.8	100.9	103.1
57.5°	69.1	68.4	69.1	72.0	75.2	76.7	79.2	82.1	85.7	87.9	88.6
60°	53.5	53.9	54.6	57.2	59.7	61.9	62.9	67.6	70.9	73.1	74.5
62.5°	39.4	40.2	40.9	43.1	45.6	47.4	49.2	53.2	56.1	58.2	59.7
65°	27.5	27.9	28.9	30.0	32.6	34.4	35.8	39.1	42.0	43.8	44.9
67.5°	17.0	17.4	18.1	19.5	21.3	22.8	24.2	26.4	28.9	30.7	31.1
70°	8.7	9.0	9.4	10.5	11.9	12.7	13.7	15.6	17.4	18.8	19.5
72.5°	2.9	2.9	3.3	4.0	4.7	5.4	5.8	7.6	9.0	9.8	10.1
75°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	2.2	2.9	3.6	4.0
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: P#

CATALOG NUMBER: LD4C05D010 EX4C059050 4LBCSSQMMS

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7
2.5°	254.7	253.9	253.6	253.9	253.9	253.6	254.7	256.1	257.9	253.2
5°	254.3	253.6	254.3	252.1	253.2	252.5	253.9	253.6	255.0	253.6
7.5°	253.2	251.8	252.1	251.0	252.5	250.7	251.8	253.9	252.5	250.3
10°	249.6	248.9	251.4	247.8	247.1	248.5	251.4	249.2	248.5	249.2
12.5°	246.0	246.0	247.1	244.2	244.5	245.2	246.7	245.2	246.0	247.8
15°	242.0	241.3	243.1	240.9	240.6	239.8	241.3	241.3	242.0	240.9
17.5°	237.3	236.2	236.2	235.5	235.1	236.9	237.7	238.0	238.4	236.9
20°	231.5	231.2	232.2	231.2	231.5	231.9	231.9	231.2	234.4	230.4
22.5°	225.4	226.4	225.0	224.3	225.0	225.7	225.7	226.1	225.4	224.6
25°	219.2	219.9	220.3	218.1	219.2	218.1	220.7	221.0	219.6	220.3
27.5°	213.8	212.7	212.3	210.9	211.6	211.3	211.6	211.6	213.8	210.9
30°	205.5	204.4	204.7	203.7	204.0	203.7	204.0	204.0	205.5	205.1
32.5°	197.5	196.4	196.8	195.7	195.7	196.1	195.3	195.3	196.4	195.7
35°	189.9	187.4	187.7	187.4	187.7	186.3	186.3	185.9	186.7	184.8
37.5°	179.1	178.0	177.6	177.3	177.6	176.9	177.6	176.5	177.6	176.2
40°	169.3	168.6	168.9	166.8	166.8	167.1	166.4	166.0	166.4	167.8
42.5°	159.5	158.1	157.4	156.6	157.0	155.9	155.5	154.8	155.5	154.1
45°	147.9	147.9	147.6	145.8	146.1	146.1	144.7	143.2	143.6	143.6
47.5°	137.5	136.7	136.4	134.6	134.2	133.8	132.4	131.3	131.3	130.2
50°	125.9	125.2	124.1	122.3	121.5	119.4	118.3	116.8	115.4	115.4
52.5°	115.0	112.5	111.0	108.2	107.1	106.0	103.1	102.0	100.9	99.8
55°	102.0	99.8	97.0	93.7	92.2	90.4	87.5	85.4	83.9	84.3
57.5°	89.3	85.7	82.8	78.5	76.7	75.6	72.7	69.8	68.4	68.4
60°	73.8	70.9	67.3	63.3	61.9	60.1	56.4	54.6	53.5	52.5
62.5°	59.0	56.8	53.5	48.5	47.4	45.6	43.1	40.9	39.8	39.8
65°	44.1	42.0	39.1	35.5	34.0	32.6	30.4	28.2	27.1	26.8
67.5°	31.1	28.6	26.0	23.2	22.1	21.3	19.2	17.7	17.0	16.6
70°	18.8	17.4	15.6	13.4	12.3	11.6	10.1	9.0	8.7	8.3
72.5°	9.8	8.7	7.2	5.8	5.1	4.3	3.6	2.9	2.5	2.5
75°	3.6	2.9	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)