

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: P843278

Luminaire Tested: **LD4C08DE010B50 EU4C08B50 4LBSQLI**

Issue Date: 5/7/2024

Test Information

Test Method: LM-79-08
Report Number: P843278
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209151)
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C08DE010B50 EU4C08B50 4LBSQLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

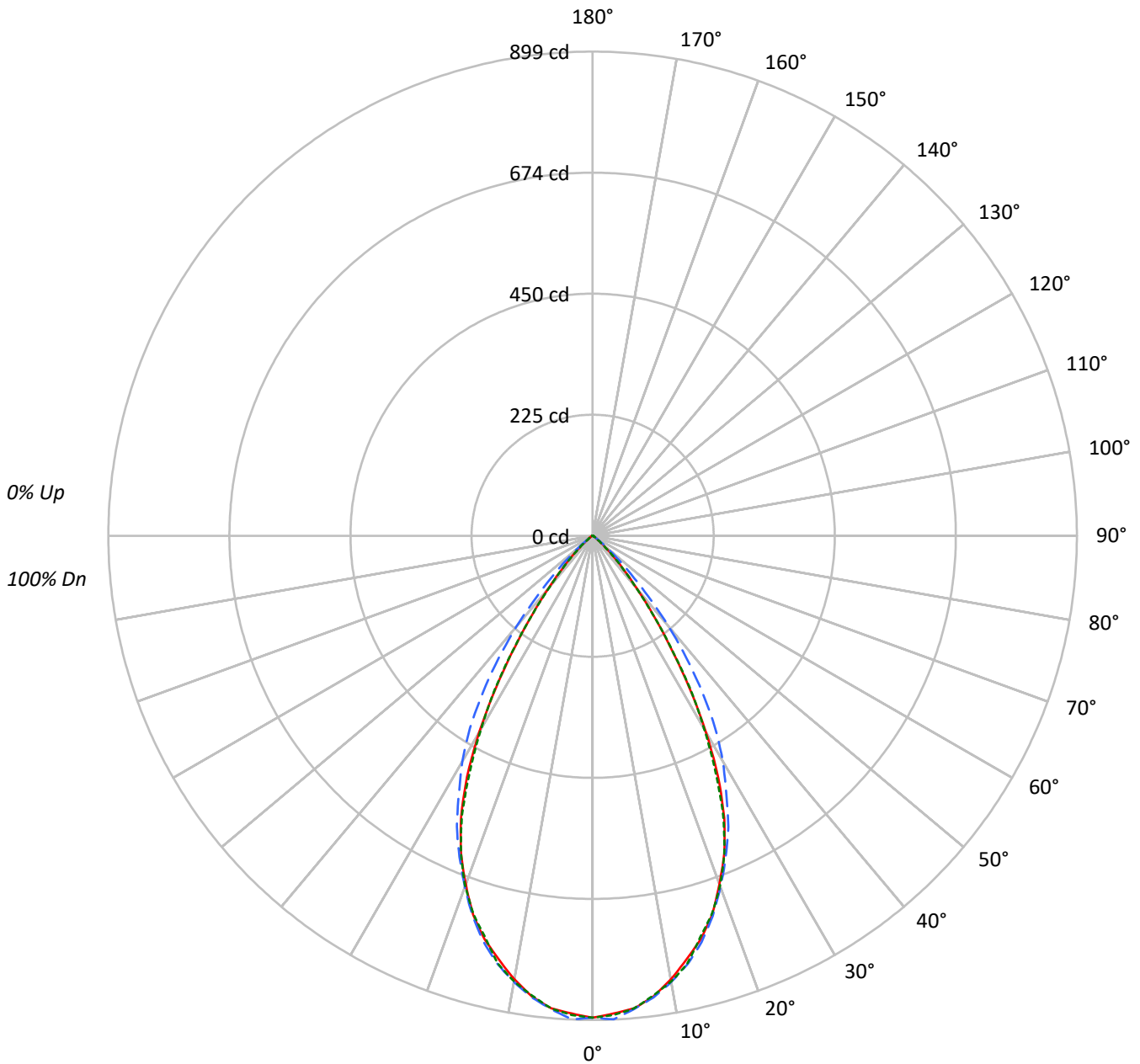
Lumens per Lamp: N/A
Luminaire Lumens: 825.9 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.6
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

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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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	72	67	76	71	67	74	70	66	73	69	66	65																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	86329	86329	86329
5°	85331	85448	85331
10°	81929	82419	82321
15°	77457	78026	77047
20°	70686	71210	71035
25°	61547	63484	61121
30°	46806	53825	46115
35°	29460	41851	29730
40°	15896	27648	15619
45°	7519	13659	7450
50°	2807	5119	2807
55°	1329	1615	1245
60°	868	772	868
65°	502	502	502
70°	339	480	339
75°	186	186	186
80°	278	278	278
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	10.0
10°-20°	217.4	26.3
20°-30°	265.6	32.2
30°-40°	185.8	22.5
40°-50°	60.9	7.4
50°-60°	9.7	1.2
60°-70°	2.6	0.3
70°-80°	0.8	0.1
80°-90°	0.2	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°	565.9	68.5
0°-40°	751.7	91.0
0°-60°	822.2	99.6
0°-90°	825.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	825.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	881	881	882	877	881	83
15°	775	778	781	776	771	216
25°	578	587	596	585	574	260
35°	250	295	355	291	252	160
45°	55	68	100	67	55	46
55°	8	9	10	9	7	8
65°	2	3	2	3	2	2
75°	0	0	0	0	0	1
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°	25°	30°	35°	40°	45°	50°
0°	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7
2.5°	887.9	894.1	892.4	896.5	896.5	891.9	893.0	894.7	897.0	898.7	885.0
5°	881.0	886.7	881.6	887.2	883.9	878.8	887.2	882.7	885.6	882.2	884.5
7.5°	862.9	872.0	861.8	868.5	866.3	863.5	866.8	865.7	867.5	864.6	858.4
10°	836.2	843.6	836.7	846.4	841.9	839.0	841.9	844.7	844.1	841.2	844.7
12.5°	805.5	814.0	810.6	816.3	811.1	811.1	818.0	816.3	816.8	814.6	818.5
15°	775.4	781.6	776.5	783.9	781.6	775.4	778.2	778.2	782.8	781.1	776.5
17.5°	737.8	742.9	737.3	739.0	736.6	735.6	747.4	739.5	744.0	740.7	741.2
20°	688.4	690.6	688.9	693.5	690.6	694.0	693.0	691.8	691.8	693.5	689.5
22.5°	638.4	638.4	640.1	641.1	643.5	640.1	646.8	641.1	641.8	645.7	644.6
25°	578.1	576.4	580.3	586.0	588.4	585.5	594.6	590.1	593.4	596.3	590.1
27.5°	504.8	504.8	508.7	518.5	520.1	523.5	536.0	536.0	540.6	536.6	541.2
30°	420.1	426.3	431.4	443.9	447.9	455.3	468.4	474.7	484.8	483.1	480.9
32.5°	333.0	341.6	342.1	355.3	366.0	378.5	396.2	411.0	418.4	423.5	417.8
35°	250.1	255.2	259.8	268.9	287.0	303.5	319.4	338.8	351.9	355.3	350.2
37.5°	183.1	184.1	188.7	197.2	210.9	226.9	246.1	267.2	280.8	285.9	280.3
40°	126.2	127.3	129.6	137.0	148.4	159.7	175.0	196.7	209.2	219.5	212.1
42.5°	84.7	85.8	88.1	93.8	100.1	110.8	122.8	136.4	148.4	152.9	148.9
45°	55.1	55.1	56.3	60.3	63.7	72.2	80.7	89.3	97.2	100.1	97.2
47.5°	32.4	33.0	34.1	36.9	40.9	44.3	50.6	56.3	58.6	60.8	59.7
50°	18.7	18.7	20.4	22.2	25.0	27.3	29.5	31.8	33.0	34.1	33.0
52.5°	10.3	10.8	11.3	12.0	13.1	15.3	17.0	17.0	17.7	18.2	17.7
55°	7.9	7.9	7.9	7.9	8.6	8.6	8.6	9.1	9.1	9.6	9.1
57.5°	5.7	5.7	5.7	6.2	6.2	6.2	5.7	5.7	5.7	5.7	5.7
60°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0
62.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
65°	2.2	2.2	2.9	2.9	2.9	2.9	2.9	2.2	2.2	2.2	2.2
67.5°	1.7	1.7	1.7	1.7	2.2	2.2	1.7	1.7	1.7	1.7	1.7
70°	1.2	1.2	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
72.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	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°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7
2.5°	894.7	885.0	886.2	891.3	888.4	891.3	890.7	890.7
5°	885.0	882.2	877.6	875.9	879.3	886.7	885.6	881.0
7.5°	866.8	859.4	864.6	866.8	864.0	868.5	870.9	861.1
10°	845.3	842.4	841.2	842.4	841.2	845.8	840.2	840.2
12.5°	814.6	810.0	810.0	816.8	812.8	809.4	814.0	813.4
15°	783.9	774.7	774.7	777.0	778.7	776.5	777.0	771.3
17.5°	738.3	735.6	731.6	737.8	739.5	737.3	739.0	736.1
20°	695.7	695.7	688.4	691.2	693.5	695.2	696.3	691.8
22.5°	641.1	642.3	637.2	642.8	644.6	638.9	640.1	638.9
25°	591.1	590.6	586.6	584.3	585.5	583.2	582.7	574.1
27.5°	536.0	530.3	521.8	524.1	514.4	506.5	506.5	493.4
30°	476.4	466.7	455.3	443.9	435.4	426.3	421.1	413.9
32.5°	406.4	393.3	379.2	363.8	354.1	340.5	333.0	337.1
35°	337.1	317.7	298.5	283.1	268.3	260.3	251.2	252.4
37.5°	270.0	242.7	225.7	209.2	196.7	186.5	182.4	181.3
40°	197.2	175.7	158.5	146.7	138.1	130.2	125.6	124.0
42.5°	136.4	121.1	107.5	97.7	92.1	86.9	84.7	84.1
45°	88.6	79.5	70.5	63.7	59.1	55.7	55.1	54.6
47.5°	55.7	51.2	45.5	40.4	36.4	34.1	32.4	32.4
50°	31.8	30.1	27.3	24.4	22.2	21.0	19.4	18.7
52.5°	17.0	17.0	15.9	13.6	12.0	10.8	10.8	10.3
55°	9.1	9.1	8.6	8.6	7.9	7.9	7.9	7.4
57.5°	5.7	5.7	6.2	6.2	5.7	5.7	5.7	5.7
60°	4.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
62.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
65°	2.2	2.9	2.9	2.9	2.9	2.2	2.2	2.2
67.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
70°	1.7	1.7	1.7	1.7	1.7	1.2	1.2	1.2
72.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	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
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
90°	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)