

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P755381

Luminaire Tested: LD4D90BD010-EU4DR3070959040-4LBDP1H

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755381
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/30/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D90BD010-EU4DR3070959040-4LBDP1H
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8878.2 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

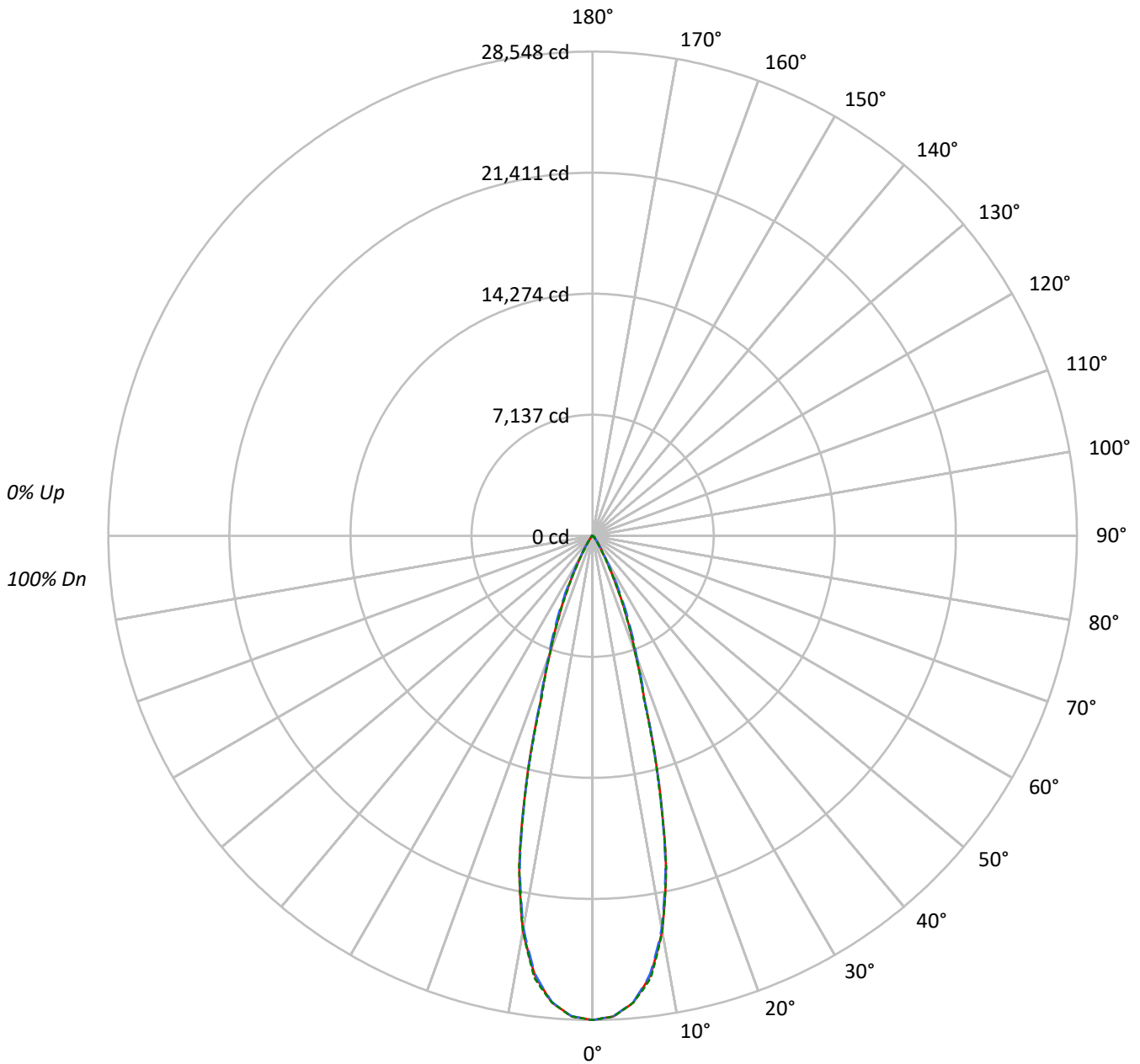
Input Watts (W): 98.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

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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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																			
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92																			
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89																			
4	103	98	93	90	102	96	93	90	94	91	89	93	90	88	91	89	87	85																			
5	100	94	89	86	98	93	89	86	91	88	85	90	86	84	88	86	83	82																			
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79																			
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77																			
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74																			
9	88	81	76	73	87	80	76	73	80	76	73	79	75	73	78	75	73	72																			
10	85	78	74	71	85	78	74	71	77	73	71	76	73	71	76	73	70	69																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2185153	2185153	2185153
5°	2122419	2119945	2122527
10°	1838341	1825376	1837905
15°	1199423	1192980	1186989
20°	596419	618795	595621
25°	300436	338788	294280
30°	120292	131066	104807
35°	55794	53440	44787
40°	24091	26749	22692
45°	16995	21087	17147
50°	5847	15349	6180
55°	3363	6366	3550
60°	2358	2786	2358
65°	1521	1521	1521
70°	940	627	940
75°	0	414	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 21087 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2510.4	28.3
10°-20°	4043.0	45.5
20°-30°	1747.1	19.7
30°-40°	398.2	4.5
40°-50°	136.7	1.5
50°-60°	33.4	0.4
60°-70°	8.6	0.1
70°-80°	0.9	0.0
80°-90°	0.0	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°	8300.4	93.5
0°-40°	8698.6	98.0
0°-60°	8868.7	99.9
0°-90°	8878.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8878.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	28548	28548	28548	28548	28548	
5°	27623	27596	27591	27648	27624	2512
15°	15136	14954	15055	15006	14979	4053
25°	3557	3692	4011	3598	3484	1703
35°	597	610	572	568	479	405
45°	157	195	195	195	158	111
55°	25	27	48	28	27	25
65°	8	8	8	8	8	8
75°	0	0	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	28547.9	28547.9	28547.9	28547.9	28547.9
2.5°	28358.7	28339.1	28350.3	28364.3	28369.9
5°	27622.8	27596.2	27590.6	27648.1	27624.2
7.5°	26138.5	26100.7	26043.2	26173.6	26295.5
10°	23652.1	23610.0	23485.3	23547.0	23646.5
12.5°	19981.3	19845.3	19842.5	20038.8	20012.1
15°	15135.9	14953.7	15054.6	15005.6	14979.0
17.5°	10178.5	10108.4	10242.9	10202.3	10027.1
20°	7322.0	7340.2	7596.7	7467.8	7312.2
22.5°	5342.9	5408.8	5712.9	5380.8	5258.8
25°	3557.3	3691.8	4011.4	3597.9	3484.4
27.5°	2187.9	2249.6	2573.3	2159.9	2098.2
30°	1361.0	1330.1	1482.9	1272.7	1185.8
32.5°	892.8	853.6	902.6	810.1	740.0
35°	597.1	609.7	571.9	567.7	479.3
37.5°	372.8	428.9	378.4	403.7	308.4
40°	241.1	311.2	267.7	295.7	227.1
42.5°	197.6	239.7	220.1	234.1	201.8
45°	157.0	194.8	194.8	194.8	158.4
47.5°	86.9	130.3	166.8	133.2	92.5
50°	49.1	65.9	128.9	68.7	51.9
52.5°	33.6	37.8	88.3	39.2	35.0
55°	25.2	26.6	47.7	28.0	26.6
57.5°	19.6	21.0	25.2	21.0	19.6
60°	15.4	15.4	18.2	16.8	15.4
62.5°	11.2	11.2	12.6	11.2	11.2
65°	8.4	8.4	8.4	8.4	8.4
67.5°	4.2	5.6	5.6	5.6	5.6
70°	4.2	2.8	2.8	2.8	4.2
72.5°	2.8	1.4	1.4	1.4	1.4
75°	0.0	0.0	1.4	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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