

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: P755356

Luminaire Tested: LD4D90BD010-EU4DR3070959030-4LBDP1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755356
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-EU4DR3070959030-4LBDP1LI
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8813.0 lumens
Efficiency: N/A
Efficacy: 89.1 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

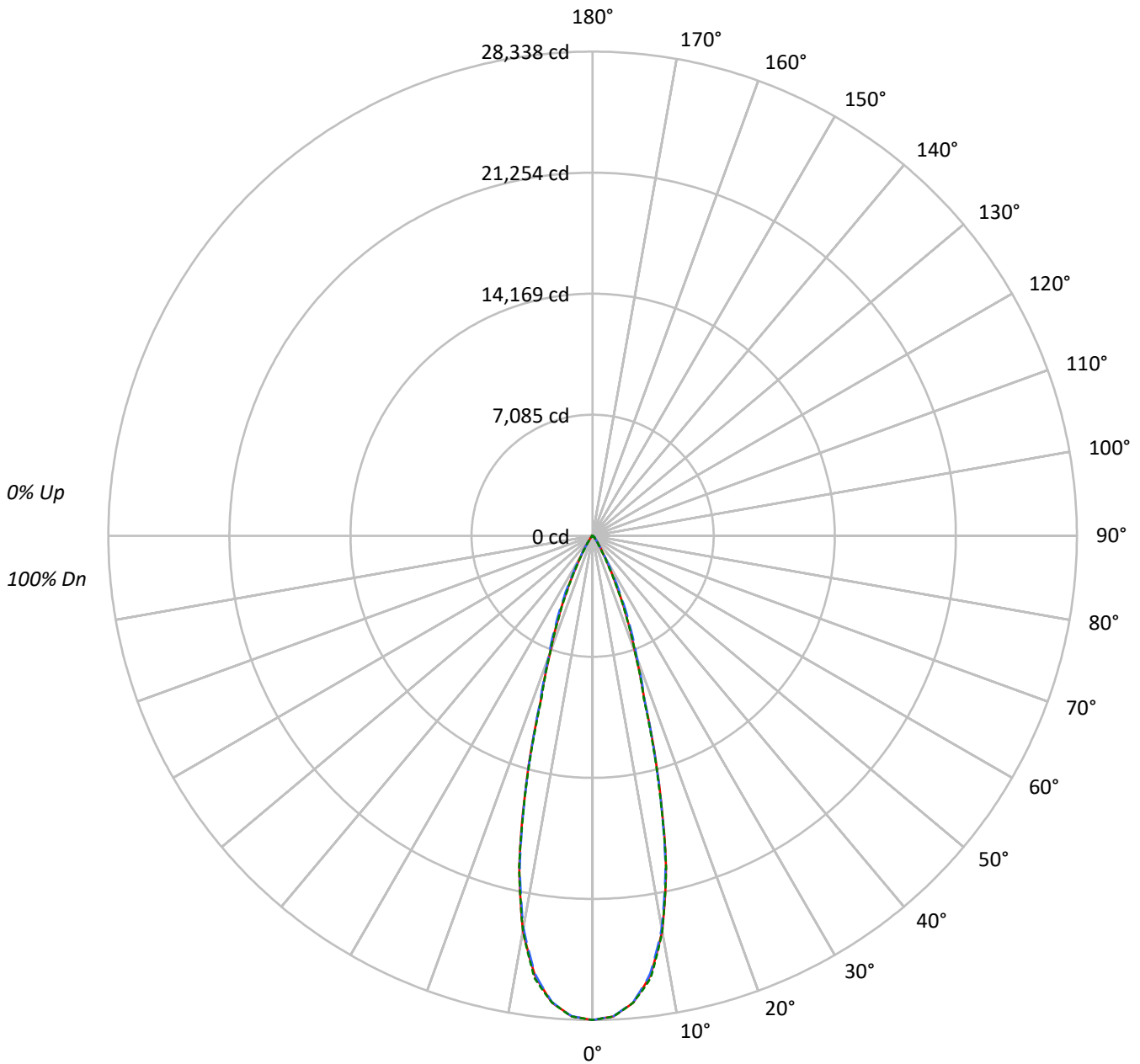


Downlight

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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	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°	2169087	2169087	2169087
5°	2106814	2104355	2106922
10°	1824824	1811953	1824389
15°	1190603	1184216	1178257
20°	592029	614242	591239
25°	298224	336297	292117
30°	119408	130102	104029
35°	55383	53047	44460
40°	23911	26549	22522
45°	16865	20935	17017
50°	5799	15242	6133
55°	3336	6312	3523
60°	2342	2771	2342
65°	1503	1503	1503
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: 20935 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2491.9	28.3
10°-20°	4013.2	45.5
20°-30°	1734.2	19.7
30°-40°	395.3	4.5
40°-50°	135.7	1.5
50°-60°	33.2	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°	8239.3	93.5
0°-40°	8634.6	98.0
0°-60°	8803.5	99.9
0°-90°	8813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8813.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	28338	28338	28338	28338	28338	
5°	27420	27393	27388	27445	27421	2494
15°	15025	14844	14944	14895	14869	4023
25°	3531	3665	3982	3572	3459	1690
35°	593	605	568	564	476	402
45°	156	193	193	193	157	111
55°	25	26	47	28	26	24
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°	28338.0	28338.0	28338.0	28338.0	28338.0
2.5°	28150.2	28130.7	28141.8	28155.7	28161.3
5°	27419.7	27393.3	27387.7	27444.8	27421.1
7.5°	25946.3	25908.8	25851.7	25981.1	26102.2
10°	23478.2	23436.4	23312.6	23373.8	23472.6
12.5°	19834.4	19699.4	19696.6	19891.4	19865.0
15°	15024.6	14843.8	14944.0	14895.3	14868.8
17.5°	10103.6	10034.1	10167.6	10127.3	9953.4
20°	7268.1	7286.2	7540.8	7412.8	7258.4
22.5°	5303.6	5369.0	5670.9	5341.2	5220.2
25°	3531.1	3664.7	3981.9	3571.5	3458.8
27.5°	2171.8	2233.0	2554.4	2144.0	2082.8
30°	1351.0	1320.3	1472.0	1263.3	1177.0
32.5°	886.3	847.3	896.0	804.2	734.6
35°	592.7	605.2	567.7	563.5	475.8
37.5°	370.1	425.7	375.7	400.7	306.1
40°	239.3	308.9	265.7	293.6	225.4
42.5°	196.2	237.9	218.4	232.3	200.3
45°	155.8	193.4	193.4	193.4	157.2
47.5°	86.3	129.4	165.6	132.2	91.8
50°	48.7	65.4	128.0	68.2	51.5
52.5°	33.4	37.6	87.7	39.0	34.8
55°	25.0	26.4	47.3	27.8	26.4
57.5°	19.5	20.9	25.0	20.9	19.5
60°	15.3	15.3	18.1	16.7	15.3
62.5°	11.1	11.1	12.5	11.1	11.1
65°	8.3	8.3	8.3	8.3	8.3
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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