

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: P748353

Luminaire Tested: LD4D45BD010-EU4DR3040509035-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P748353
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: LD4D45BD010-EU4DR3040509035-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4494.5 lumens
Efficiency: N/A
Efficacy: 116.1 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

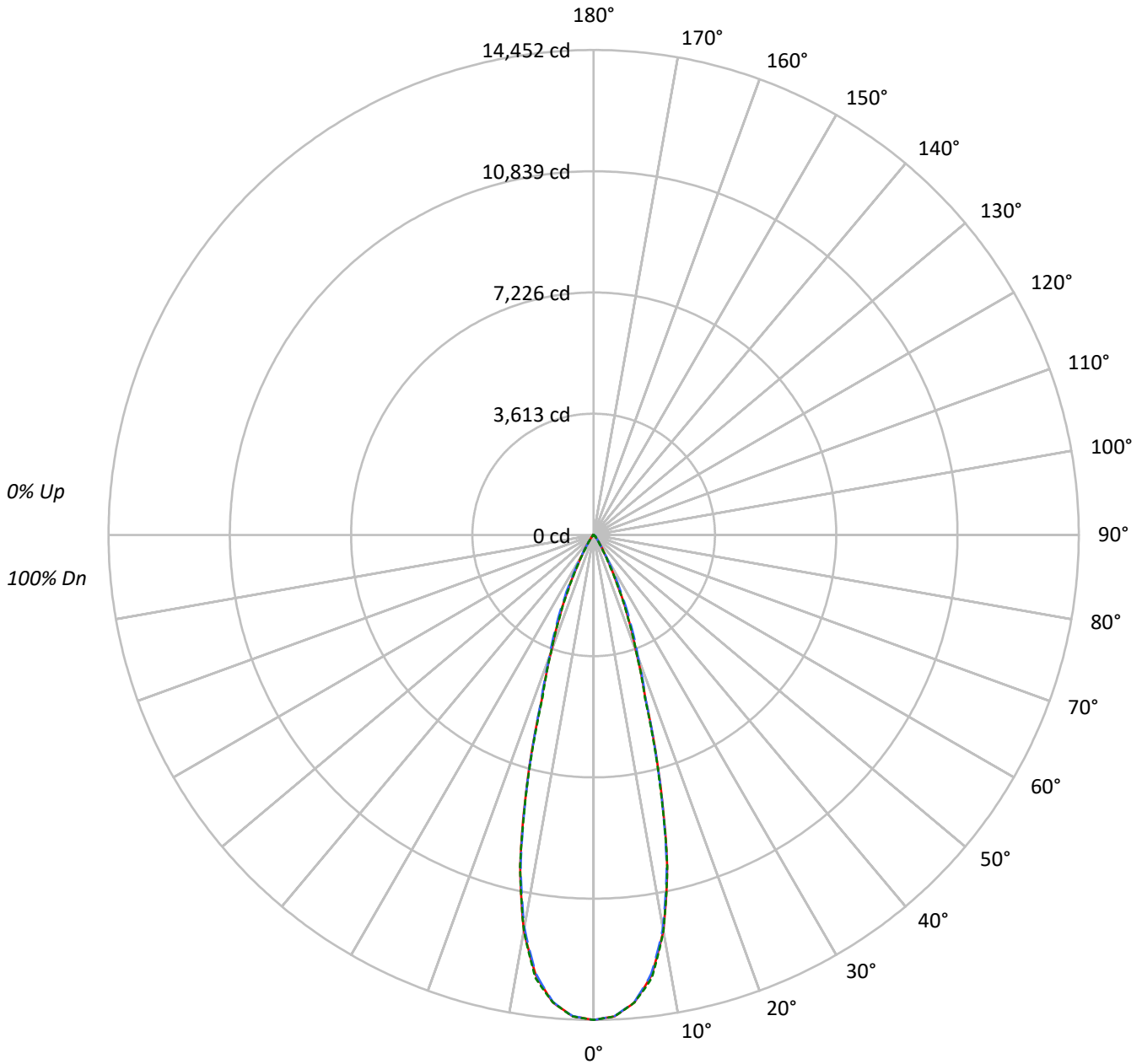
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

TEST NUMBER: P748353
CATALOG NUMBER: LD4D45BD010-EU4DR3040509035-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P748353

CATALOG NUMBER: LD4D45BD010-EU4DR3040509035-4LBS1LI

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°	1106205	1106205	1106205
5°	1074448	1073196	1074502
10°	930638	924079	930421
15°	607196	603931	600896
20°	301932	313254	301525
25°	152089	171505	148972
30°	60897	66350	53057
35°	28248	27052	22678
40°	12190	13539	11481
45°	8606	10673	8682
50°	2953	7776	3132
55°	1708	3216	1802
60°	1194	1408	1194
65°	779	779	779
70°	470	313	470
75°	0	207	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 10673 cd/sqm



TEST NUMBER: P748353

CATALOG NUMBER: LD4D45BD010-EU4DR3040509035-4LBS1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1270.8	28.3
10°-20°	2046.7	45.5
20°-30°	884.4	19.7
30°-40°	201.6	4.5
40°-50°	69.2	1.5
50°-60°	16.9	0.4
60°-70°	4.4	0.1
70°-80°	0.5	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°	4202.0	93.5
0°-40°	4403.5	98.0
0°-60°	4489.6	99.9
0°-90°	4494.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4494.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14452	14452	14452	14452	14452	
5°	13984	13970	13967	13996	13984	1272
15°	7662	7570	7621	7596	7583	2052
25°	1801	1869	2031	1821	1764	862
35°	302	309	290	287	243	205
45°	80	99	99	99	80	56
55°	13	14	24	14	14	12
65°	4	4	4	4	4	4
75°	0	0	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P748353

CATALOG NUMBER: LD4D45BD010-EU4DR3040509035-4LBS1LI

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	14452.0	14452.0	14452.0	14452.0	14452.0
2.5°	14356.3	14346.3	14352.0	14359.1	14361.9
5°	13983.7	13970.3	13967.4	13996.5	13984.4
7.5°	13232.3	13213.2	13184.1	13250.1	13311.8
10°	11973.6	11952.3	11889.2	11920.4	11970.8
12.5°	10115.3	10046.5	10045.0	10144.4	10130.9
15°	7662.4	7570.1	7621.2	7596.4	7582.9
17.5°	5152.7	5117.2	5185.4	5164.8	5076.1
20°	3706.7	3715.9	3845.7	3780.5	3701.7
22.5°	2704.8	2738.1	2892.1	2723.9	2662.2
25°	1800.8	1868.9	2030.7	1821.4	1763.9
27.5°	1107.6	1138.8	1302.7	1093.4	1062.2
30°	689.0	673.4	750.7	644.3	600.3
32.5°	452.0	432.1	456.9	410.1	374.6
35°	302.3	308.7	289.5	287.4	242.7
37.5°	188.7	217.1	191.6	204.3	156.1
40°	122.0	157.5	135.5	149.7	114.9
42.5°	100.0	121.3	111.4	118.5	102.2
45°	79.5	98.6	98.6	98.6	80.2
47.5°	44.0	66.0	84.4	67.4	46.8
50°	24.8	33.3	65.3	34.8	26.3
52.5°	17.0	19.2	44.7	19.9	17.7
55°	12.8	13.5	24.1	14.2	13.5
57.5°	9.9	10.6	12.8	10.6	9.9
60°	7.8	7.8	9.2	8.5	7.8
62.5°	5.7	5.7	6.4	5.7	5.7
65°	4.3	4.3	4.3	4.3	4.3
67.5°	2.1	2.8	2.8	2.8	2.8
70°	2.1	1.4	1.4	1.4	2.1
72.5°	1.4	0.7	0.7	0.7	0.7
75°	0.0	0.0	0.7	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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)