

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: P749144

Luminaire Tested: LD4D50D010-EU4DR3040509040-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P749144
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: LD4D50D010-EU4DR3040509040-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4933.6 lumens
Efficiency: N/A
Efficacy: 105.0 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

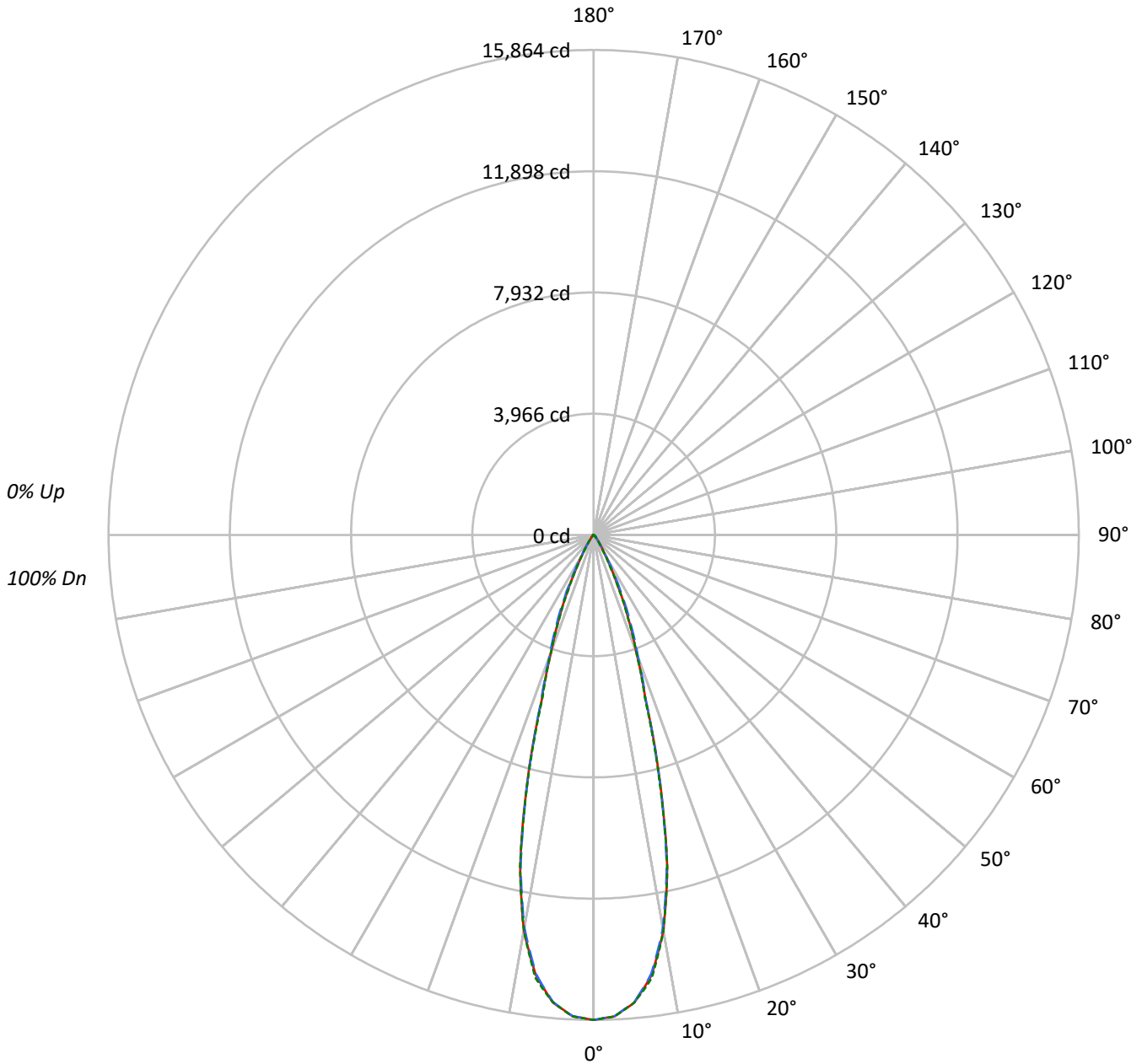
Input Watts (W): 47
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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°	1214277	1214277	1214277
5°	1179422	1178038	1179475
10°	1021552	1014355	1021312
15°	666518	662936	659600
20°	331427	343857	330979
25°	166953	188262	163533
30°	66845	72829	58237
35°	31004	29696	24893
40°	13389	14868	12610
45°	9439	11723	9526
50°	3251	8538	3430
55°	1868	3536	1975
60°	1317	1546	1317
65°	851	851	851
70°	515	358	515
75°	0	237	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 11723 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1395.0	28.3
10°-20°	2246.6	45.5
20°-30°	970.8	19.7
30°-40°	221.3	4.5
40°-50°	76.0	1.5
50°-60°	18.6	0.4
60°-70°	4.8	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°	4612.5	93.5
0°-40°	4833.7	98.0
0°-60°	4928.3	99.9
0°-90°	4933.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4933.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15864	15864	15864	15864	15864	
5°	15350	15335	15332	15364	15351	1396
15°	8411	8310	8366	8338	8324	2252
25°	1977	2052	2229	1999	1936	946
35°	332	339	318	315	266	225
45°	87	108	108	108	88	62
55°	14	15	26	16	15	14
65°	5	5	5	5	5	5
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°	15863.9	15863.9	15863.9	15863.9	15863.9
2.5°	15758.8	15747.9	15754.1	15761.9	15765.0
5°	15349.9	15335.1	15331.9	15363.9	15350.6
7.5°	14525.0	14504.0	14472.1	14544.5	14612.3
10°	13143.3	13120.0	13050.7	13084.9	13140.2
12.5°	11103.5	11027.9	11026.4	11135.4	11120.6
15°	8411.0	8309.7	8365.8	8338.5	8323.7
17.5°	5656.1	5617.2	5691.9	5669.4	5572.0
20°	4068.8	4078.9	4221.4	4149.8	4063.3
22.5°	2969.0	3005.6	3174.7	2990.1	2922.3
25°	1976.8	2051.5	2229.1	1999.3	1936.3
27.5°	1215.8	1250.1	1430.0	1200.2	1166.0
30°	756.3	739.1	824.0	707.2	658.9
32.5°	496.1	474.3	501.6	450.2	411.2
35°	331.8	338.8	317.8	315.4	266.4
37.5°	207.2	238.3	210.3	224.3	171.4
40°	134.0	172.9	148.8	164.3	126.2
42.5°	109.8	133.2	122.3	130.1	112.2
45°	87.2	108.3	108.3	108.3	88.0
47.5°	48.3	72.4	92.7	74.0	51.4
50°	27.3	36.6	71.7	38.2	28.8
52.5°	18.7	21.0	49.1	21.8	19.5
55°	14.0	14.8	26.5	15.6	14.8
57.5°	10.9	11.7	14.0	11.7	10.9
60°	8.6	8.6	10.1	9.3	8.6
62.5°	6.2	6.2	7.0	6.2	6.2
65°	4.7	4.7	4.7	4.7	4.7
67.5°	2.3	3.1	3.1	3.1	3.1
70°	2.3	1.6	1.6	1.6	2.3
72.5°	1.6	0.8	0.8	0.8	0.8
75°	0.0	0.0	0.8	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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