

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: P780178

Luminaire Tested: LER4D20D010-EC4DR3020359027-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780178
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: LER4D20D010-EC4DR3020359027-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1927.5 lumens
Efficiency: N/A
Efficacy: 83.4 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): 23.1
Input Voltage (V): NR
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: 24 FT



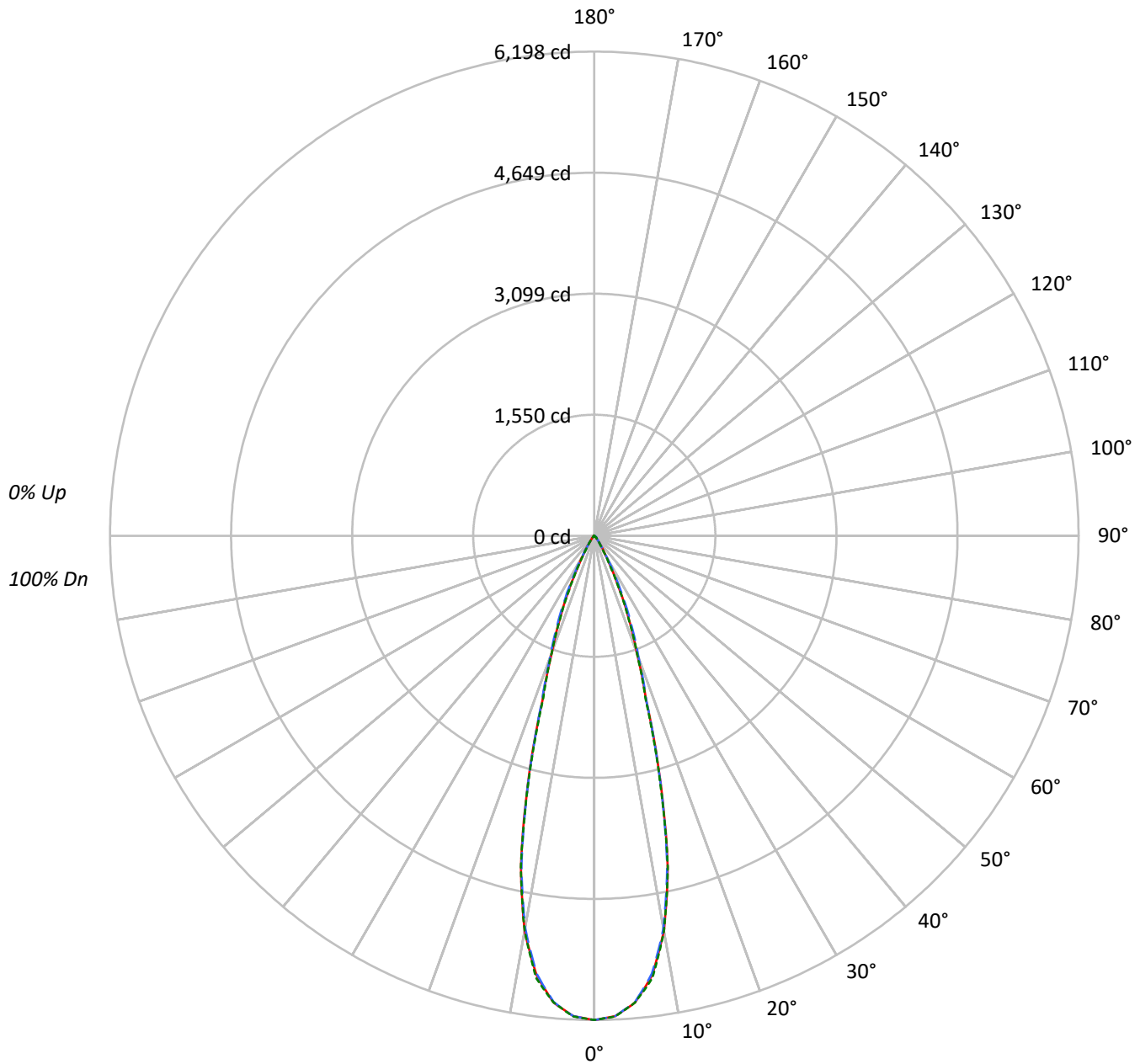
Downlight



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	115	113	111	109	112	110	109	107	106	105	104		103	102	101		99
2	111	107	104	101	109	105	102	100	102	100	98		99	97	96		97
3	107	102	98	95	105	101	97	94	98	95	93		96	93	91		94
4	103	98	93	90	102	96	93	90	94	91	89		93	90	88		91
5	100	94	89	86	98	93	89	86	91	88	85		90	86	84		88
6	97	90	85	82	95	89	85	82	88	84	81		87	83	81		85
7	94	87	82	79	92	86	82	79	85	81	78		84	81	78		83
8	91	84	79	76	90	83	79	76	82	78	76		81	78	75		80
9	88	81	76	73	87	80	76	73	80	76	73		79	75	73		78
10	85	78	74	71	85	78	74	71	77	73	71		76	73	71		76

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	474401	474401	474401
5°	460784	460239	460800
10°	399106	396292	399005
15°	260394	259000	257700
20°	129482	134337	129311
25°	65226	73553	63891
30°	26118	28451	22750
35°	12110	11606	9718
40°	5226	5805	4926
45°	3691	4579	3724
50°	1274	3334	1346
55°	734	1388	774
60°	505	612	505
65°	326	326	326
70°	201	134	201
75°	0	89	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 4579 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	545.0	28.3
10°-20°	877.7	45.5
20°-30°	379.3	19.7
30°-40°	86.5	4.5
40°-50°	29.7	1.5
50°-60°	7.3	0.4
60°-70°	1.9	0.1
70°-80°	0.2	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°	1802.0	93.5
0°-40°	1888.5	98.0
0°-60°	1925.4	99.9
0°-90°	1927.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1927.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6198	6198	6198	6198	6198	
5°	5997	5991	5990	6002	5997	545
15°	3286	3246	3268	3258	3252	880
25°	772	802	871	781	756	370
35°	130	132	124	123	104	88
45°	34	42	42	42	34	24
55°	6	6	10	6	6	5
65°	2	2	2	2	2	2
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6197.8	6197.8	6197.8	6197.8	6197.8
2.5°	6156.7	6152.4	6154.9	6157.9	6159.1
5°	5997.0	5991.2	5989.9	6002.4	5997.2
7.5°	5674.7	5666.5	5654.0	5682.3	5708.8
10°	5134.9	5125.7	5098.7	5112.0	5133.6
12.5°	4337.9	4308.4	4307.8	4350.4	4344.6
15°	3286.0	3246.5	3268.4	3257.7	3252.0
17.5°	2209.8	2194.5	2223.7	2214.9	2176.9
20°	1589.6	1593.5	1649.2	1621.3	1587.5
22.5°	1159.9	1174.3	1240.3	1168.2	1141.7
25°	772.3	801.5	870.9	781.1	756.5
27.5°	475.0	488.4	558.7	468.9	455.5
30°	295.5	288.8	321.9	276.3	257.4
32.5°	193.8	185.3	195.9	175.9	160.7
35°	129.6	132.4	124.2	123.2	104.0
37.5°	81.0	93.1	82.2	87.7	66.9
40°	52.3	67.6	58.1	64.2	49.3
42.5°	42.9	52.0	47.8	50.8	43.8
45°	34.1	42.3	42.3	42.3	34.4
47.5°	18.9	28.3	36.2	28.9	20.1
50°	10.7	14.3	28.0	14.9	11.3
52.5°	7.3	8.2	19.2	8.5	7.6
55°	5.5	5.8	10.4	6.1	5.8
57.5°	4.2	4.6	5.5	4.6	4.2
60°	3.3	3.3	4.0	3.7	3.3
62.5°	2.4	2.4	2.8	2.4	2.4
65°	1.8	1.8	1.8	1.8	1.8
67.5°	0.9	1.2	1.2	1.2	1.2
70°	0.9	0.6	0.6	0.6	0.9
72.5°	0.6	0.3	0.3	0.3	0.3
75°	0.0	0.0	0.3	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



Report Generated By 670245859 / DESKTOP-T8S5UU9





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)