

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: P780188

Luminaire Tested: LER4D20D010-EC4DR3020359040-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780188
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-EC4DR3020359040-4LBS1B
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: 1927.9 lumens
Efficiency: N/A
Efficacy: 83.5 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 (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



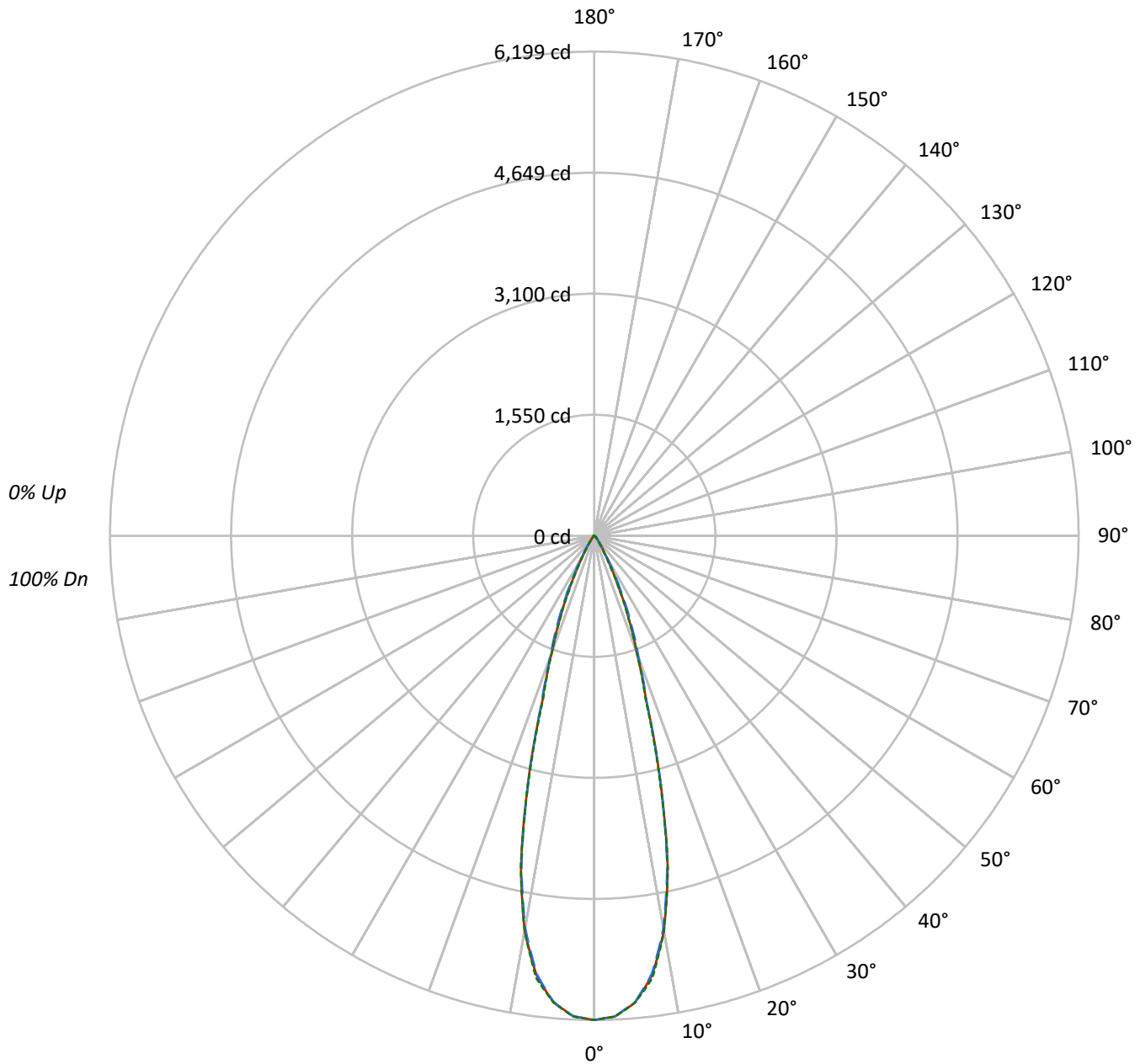
Downlight



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	474515	474515	474515
5°	460899	460362	460915
10°	399207	396386	399114
15°	260458	259063	257763
20°	129515	134369	129344
25°	65242	73570	63900
30°	26118	28460	22759
35°	12119	11606	9727
40°	5236	5815	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°	545.1	28.3
10°-20°	877.9	45.5
20°-30°	379.4	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°	1802.5	93.5
0°-40°	1888.9	98.0
0°-60°	1925.9	99.9
0°-90°	1927.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1927.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6199	6199	6199	6199	6199	
5°	5998	5993	5992	6004	5999	546
15°	3287	3247	3269	3258	3253	880
25°	772	802	871	781	757	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°	6199.3	6199.3	6199.3	6199.3	6199.3
2.5°	6158.2	6154.0	6156.4	6159.5	6160.7
5°	5998.5	5992.7	5991.5	6003.9	5998.7
7.5°	5676.1	5667.9	5655.4	5683.7	5710.2
10°	5136.2	5127.1	5099.9	5113.4	5135.0
12.5°	4339.0	4309.5	4308.9	4351.5	4345.7
15°	3286.8	3247.3	3269.2	3258.5	3252.8
17.5°	2210.3	2195.1	2224.3	2215.5	2177.4
20°	1590.0	1593.9	1649.6	1621.7	1587.9
22.5°	1160.2	1174.5	1240.6	1168.5	1142.0
25°	772.5	801.7	871.1	781.3	756.6
27.5°	475.1	488.5	558.8	469.0	455.6
30°	295.5	288.8	322.0	276.4	257.5
32.5°	193.9	185.3	196.0	175.9	160.7
35°	129.7	132.4	124.2	123.2	104.1
37.5°	81.0	93.2	82.2	87.7	67.0
40°	52.4	67.6	58.2	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)