

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: P780184

Luminaire Tested: LER4D20D010-EC4DR3020359035-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780184
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-EC4DR3020359035-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1876.1 lumens
Efficiency: N/A
Efficacy: 81.2 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



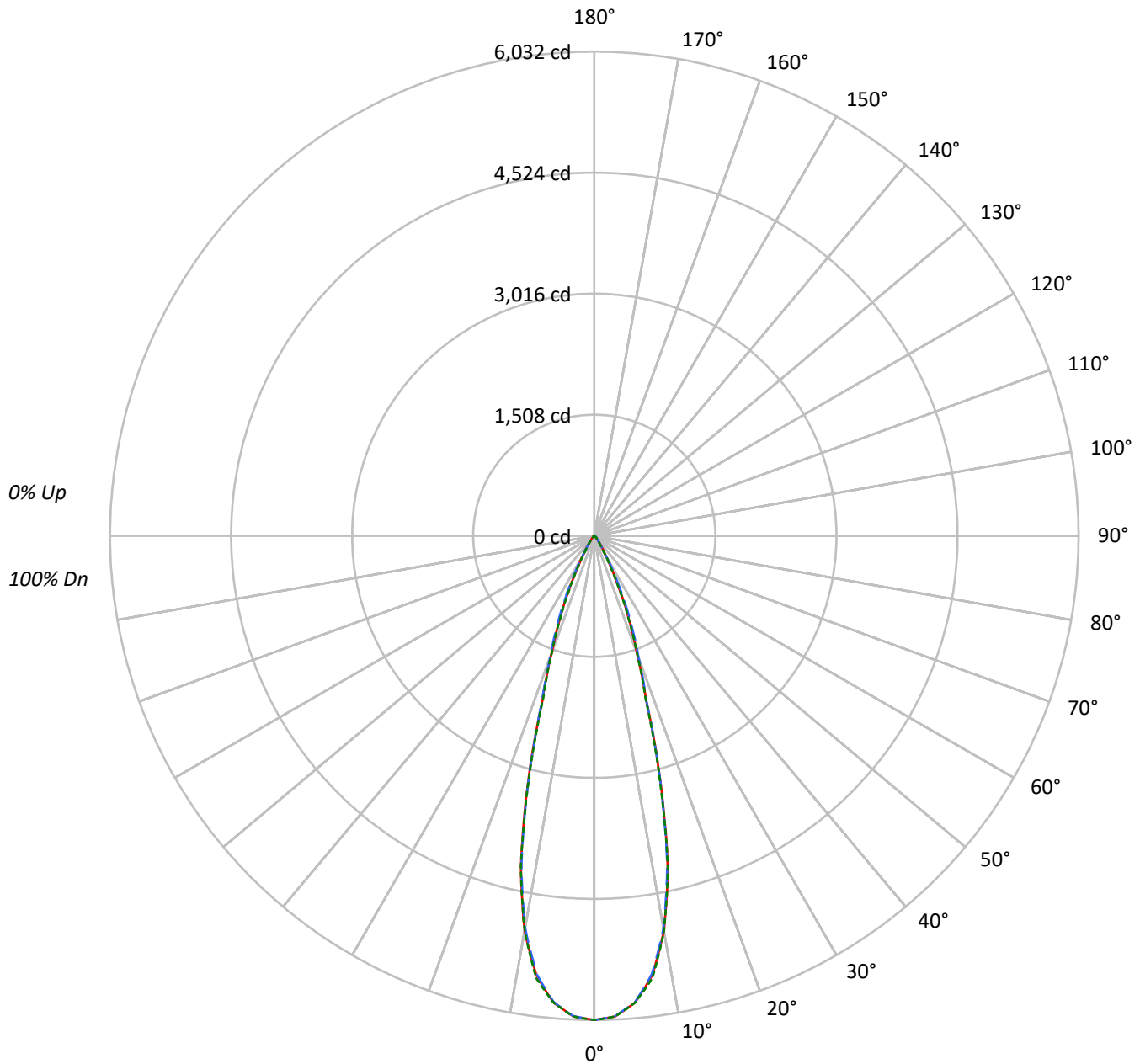
Downlight



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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°	461748	461748	461748
5°	448498	447968	448513
10°	388466	385722	388372
15°	253453	252098	250822
20°	126028	130761	125857
25°	63486	71594	62185
30°	25419	27691	22149
35°	11792	11288	9466
40°	5086	5655	4796
45°	3594	4460	3626
50°	1238	3251	1298
55°	707	1348	747
60°	505	582	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: 4460 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.5	28.3
10°-20°	854.3	45.5
20°-30°	369.2	19.7
30°-40°	84.1	4.5
40°-50°	28.9	1.5
50°-60°	7.1	0.4
60°-70°	1.8	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°	1754.0	93.5
0°-40°	1838.1	98.0
0°-60°	1874.1	99.9
0°-90°	1876.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1876.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6032	6032	6032	6032	6032	
5°	5837	5831	5830	5842	5837	531
15°	3198	3160	3181	3171	3165	856
25°	752	780	848	760	736	360
35°	126	129	121	120	101	86
45°	33	41	41	41	34	24
55°	5	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°	6032.5	6032.5	6032.5	6032.5	6032.5
2.5°	5992.5	5988.4	5990.8	5993.7	5994.9
5°	5837.1	5831.4	5830.2	5842.4	5837.3
7.5°	5523.4	5515.4	5503.2	5530.8	5556.5
10°	4998.0	4989.1	4962.7	4975.7	4996.8
12.5°	4222.3	4193.5	4193.0	4234.5	4228.8
15°	3198.4	3159.9	3181.3	3170.9	3165.2
17.5°	2150.9	2136.0	2164.4	2155.8	2118.8
20°	1547.2	1551.1	1605.3	1578.0	1545.1
22.5°	1129.0	1142.9	1207.2	1137.0	1111.2
25°	751.7	780.1	847.7	760.3	736.3
27.5°	462.3	475.4	543.8	456.4	443.3
30°	287.6	281.1	313.3	268.9	250.6
32.5°	188.7	180.4	190.7	171.2	156.4
35°	126.2	128.9	120.8	120.0	101.3
37.5°	78.8	90.6	80.0	85.3	65.1
40°	50.9	65.8	56.6	62.5	48.0
42.5°	41.8	50.6	46.5	49.4	42.6
45°	33.2	41.2	41.2	41.2	33.5
47.5°	18.3	27.6	35.2	28.1	19.5
50°	10.4	13.9	27.3	14.5	10.9
52.5°	7.1	8.0	18.7	8.3	7.4
55°	5.3	5.6	10.1	5.9	5.6
57.5°	4.1	4.5	5.3	4.5	4.1
60°	3.3	3.3	3.8	3.6	3.3
62.5°	2.3	2.3	2.7	2.3	2.3
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)