

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: P781712

Luminaire Tested: LER4D50D010-EC4DR3040509027-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781712
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: LER4D50D010-EC4DR3040509027-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4527.3 lumens
Efficiency: N/A
Efficacy: 96.3 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 (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

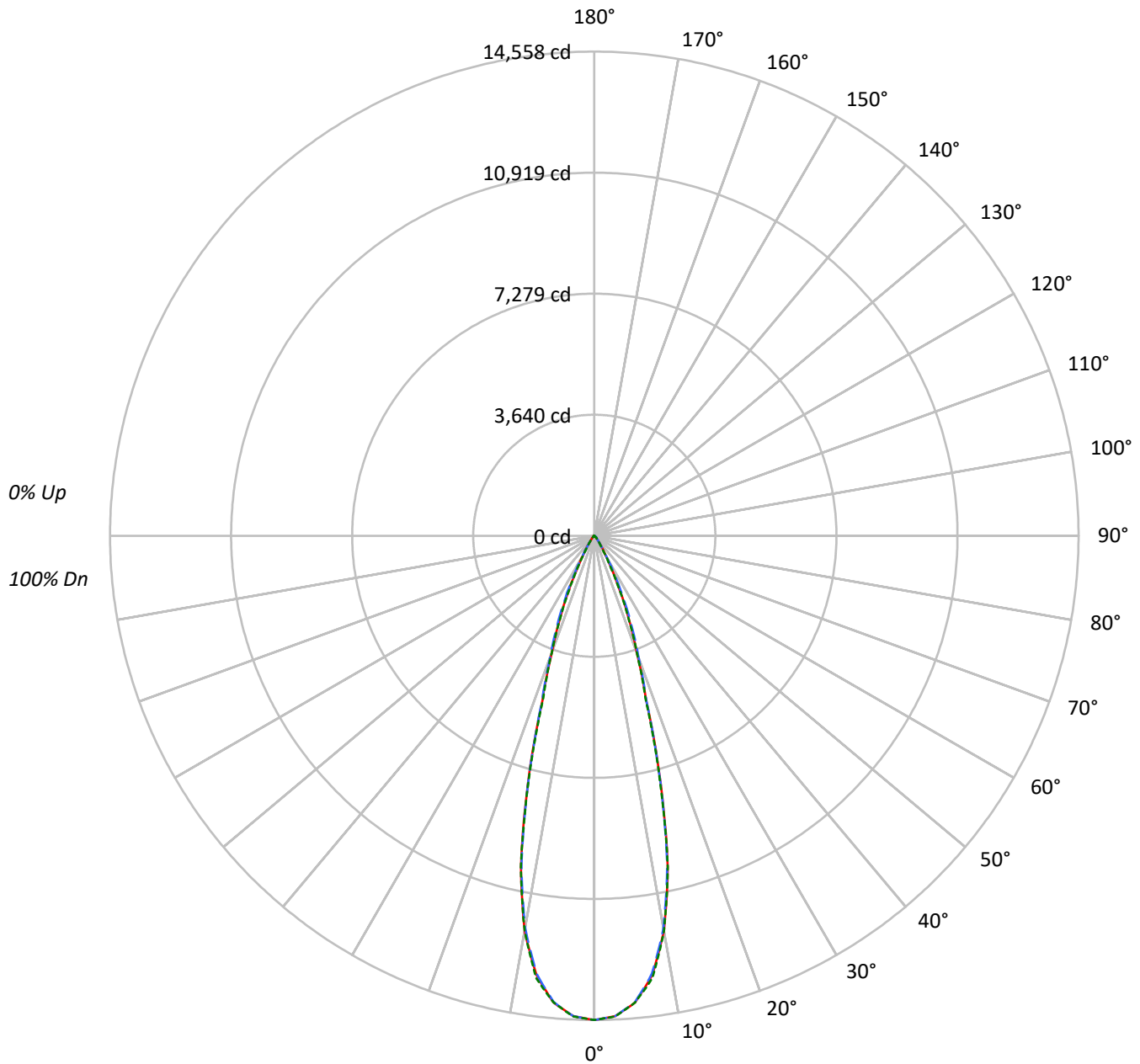


Downlight

TEST NUMBER: P781712

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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°	1114280	1114280	1114280
5°	1082293	1081026	1082347
10°	937424	930817	937206
15°	611626	608337	605278
20°	304131	315543	303724
25°	153204	172755	150062
30°	61339	66837	53446
35°	28453	27248	22837
40°	12280	13639	11571
45°	8660	10749	8746
50°	2977	7835	3144
55°	1721	3243	1815
60°	1209	1424	1209
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: 10749 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1280.1	28.3
10°-20°	2061.6	45.5
20°-30°	890.9	19.7
30°-40°	203.1	4.5
40°-50°	69.7	1.5
50°-60°	17.0	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°	4232.6	93.5
0°-40°	4435.7	98.0
0°-60°	4522.4	99.9
0°-90°	4527.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4527.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14558	14558	14558	14558	14558	
5°	14086	14072	14069	14099	14086	1281
15°	7718	7625	7677	7652	7638	2067
25°	1814	1883	2046	1835	1777	868
35°	304	311	292	290	244	207
45°	80	99	99	99	81	57
55°	13	14	24	14	14	13
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	14557.5	14557.5	14557.5	14557.5	14557.5
2.5°	14461.0	14451.0	14456.7	14463.8	14466.7
5°	14085.8	14072.2	14069.3	14098.6	14086.5
7.5°	13328.9	13309.6	13280.3	13346.7	13408.9
10°	12060.9	12039.5	11975.9	12007.3	12058.1
12.5°	10189.1	10119.8	10118.3	10218.4	10204.8
15°	7718.3	7625.4	7676.8	7651.8	7638.2
17.5°	5190.3	5154.6	5223.2	5202.5	5113.1
20°	3733.7	3743.0	3873.8	3808.0	3728.7
22.5°	2724.5	2758.1	2913.2	2743.8	2681.6
25°	1814.0	1882.6	2045.5	1834.7	1776.8
27.5°	1115.7	1147.1	1312.2	1101.4	1069.9
30°	694.0	678.3	756.2	649.0	604.7
32.5°	455.3	435.3	460.3	413.1	377.4
35°	304.5	310.9	291.6	289.5	244.4
37.5°	190.1	218.7	193.0	205.8	157.2
40°	122.9	158.7	136.5	150.8	115.8
42.5°	100.8	122.2	112.2	119.4	102.9
45°	80.0	99.3	99.3	99.3	80.8
47.5°	44.3	66.5	85.1	67.9	47.2
50°	25.0	33.6	65.8	35.0	26.4
52.5°	17.2	19.3	45.0	20.0	17.9
55°	12.9	13.6	24.3	14.3	13.6
57.5°	10.0	10.7	12.9	10.7	10.0
60°	7.9	7.9	9.3	8.6	7.9
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	2.9	2.9	2.9	2.9
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



Report Generated By 670245859 / DESKTOP-T8S5UU9





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)