

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: P780190

Luminaire Tested: LER4D20D010-EC4DR3020359040-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780190
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-EC4DR3020359040-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2159.2 lumens
Efficiency: N/A
Efficacy: 93.5 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 (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



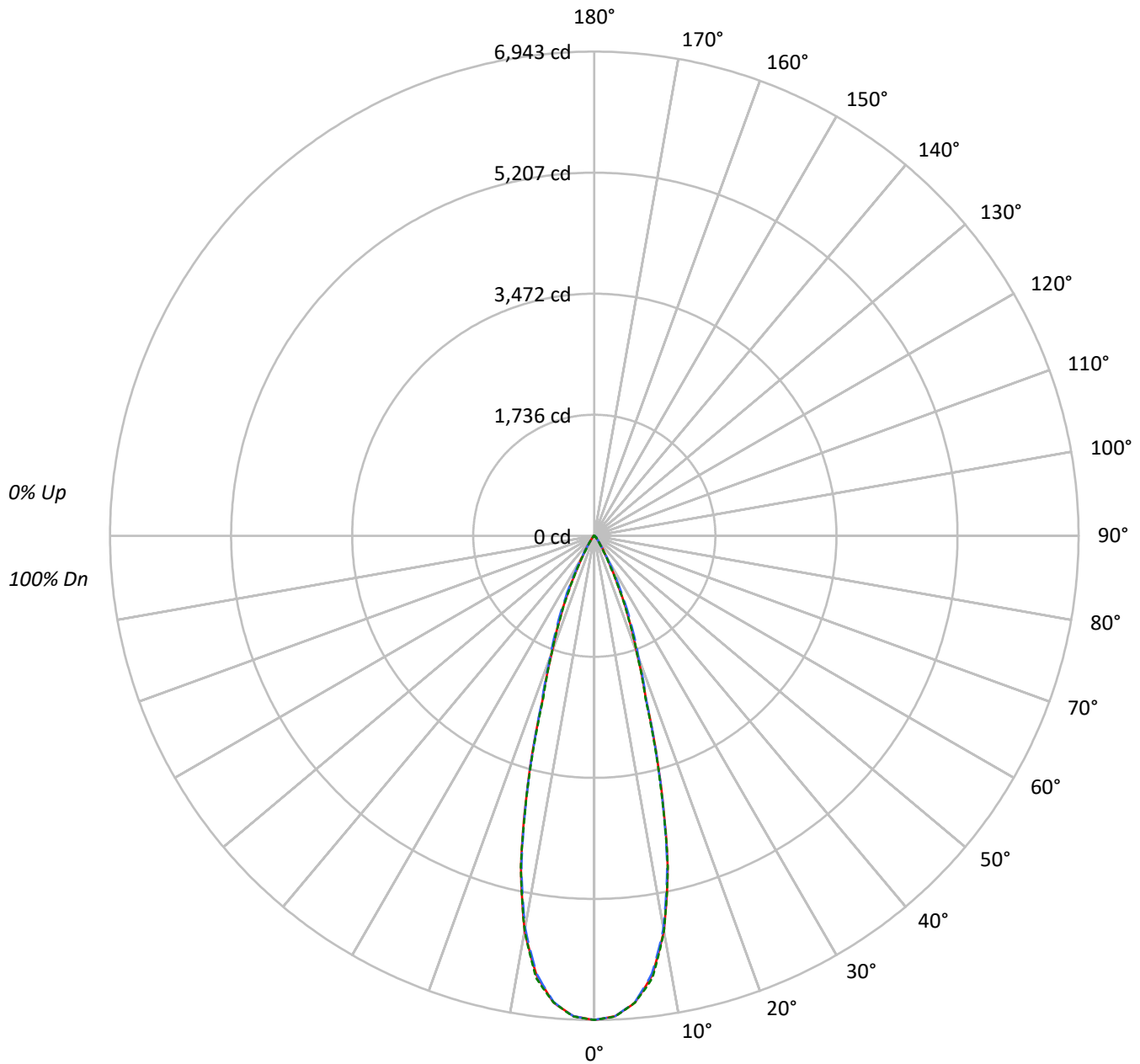
Downlight



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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					0
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°	531418	531418	531418
5°	516160	515553	516183
10°	447070	443922	446969
15°	291696	290127	288668
20°	145048	150490	144853
25°	73063	82396	71568
30°	29255	31872	25490
35°	13568	12998	10895
40°	5855	6505	5516
45°	4135	5131	4168
50°	1417	3727	1500
55°	814	1548	867
60°	566	674	566
65°	380	380	380
70°	224	157	224
75°	0	89	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 5131 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.5	28.3
10°-20°	983.2	45.5
20°-30°	424.9	19.7
30°-40°	96.8	4.5
40°-50°	33.3	1.5
50°-60°	8.1	0.4
60°-70°	2.1	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°	2018.6	93.5
0°-40°	2115.4	98.0
0°-60°	2156.8	99.9
0°-90°	2159.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2159.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6943	6943	6943	6943	6943	
5°	6718	6711	6710	6724	6718	611
15°	3681	3637	3661	3649	3643	986
25°	865	898	976	875	847	414
35°	145	148	139	138	117	98
45°	38	47	47	47	38	27
55°	6	6	12	7	6	6
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°	6942.7	6942.7	6942.7	6942.7	6942.7
2.5°	6896.6	6891.9	6894.6	6898.0	6899.4
5°	6717.7	6711.2	6709.8	6723.8	6718.0
7.5°	6356.7	6347.5	6333.5	6365.3	6394.9
10°	5752.0	5741.8	5711.5	5726.5	5750.7
12.5°	4859.3	4826.3	4825.6	4873.3	4866.8
15°	3681.0	3636.6	3661.2	3649.2	3642.8
17.5°	2475.3	2458.3	2491.0	2481.1	2438.5
20°	1780.7	1785.1	1847.5	1816.1	1778.3
22.5°	1299.3	1315.4	1389.3	1308.6	1278.9
25°	865.1	897.8	975.6	875.0	847.4
27.5°	532.1	547.1	625.8	525.3	510.3
30°	331.0	323.5	360.6	309.5	288.4
32.5°	217.1	207.6	219.5	197.0	180.0
35°	145.2	148.3	139.1	138.0	116.6
37.5°	90.6	104.3	92.0	98.1	75.0
40°	58.6	75.7	65.1	71.9	55.2
42.5°	48.1	58.3	53.5	57.0	49.1
45°	38.2	47.4	47.4	47.4	38.5
47.5°	21.1	31.7	40.6	32.4	22.5
50°	11.9	16.0	31.3	16.7	12.6
52.5°	8.2	9.2	21.5	9.6	8.5
55°	6.1	6.5	11.6	6.8	6.5
57.5°	4.8	5.1	6.1	5.1	4.8
60°	3.7	3.7	4.4	4.1	3.7
62.5°	2.8	2.8	3.1	2.8	2.8
65°	2.1	2.1	2.1	2.1	2.1
67.5°	1.0	1.4	1.4	1.4	1.4
70°	1.0	0.7	0.7	0.7	1.0
72.5°	0.7	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)