

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: P780172

Luminaire Tested: LER4D20D010-EC4DR3020359024-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780172
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-EC4DR3020359024-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1550.4 lumens
Efficiency: N/A
Efficacy: 67.1 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



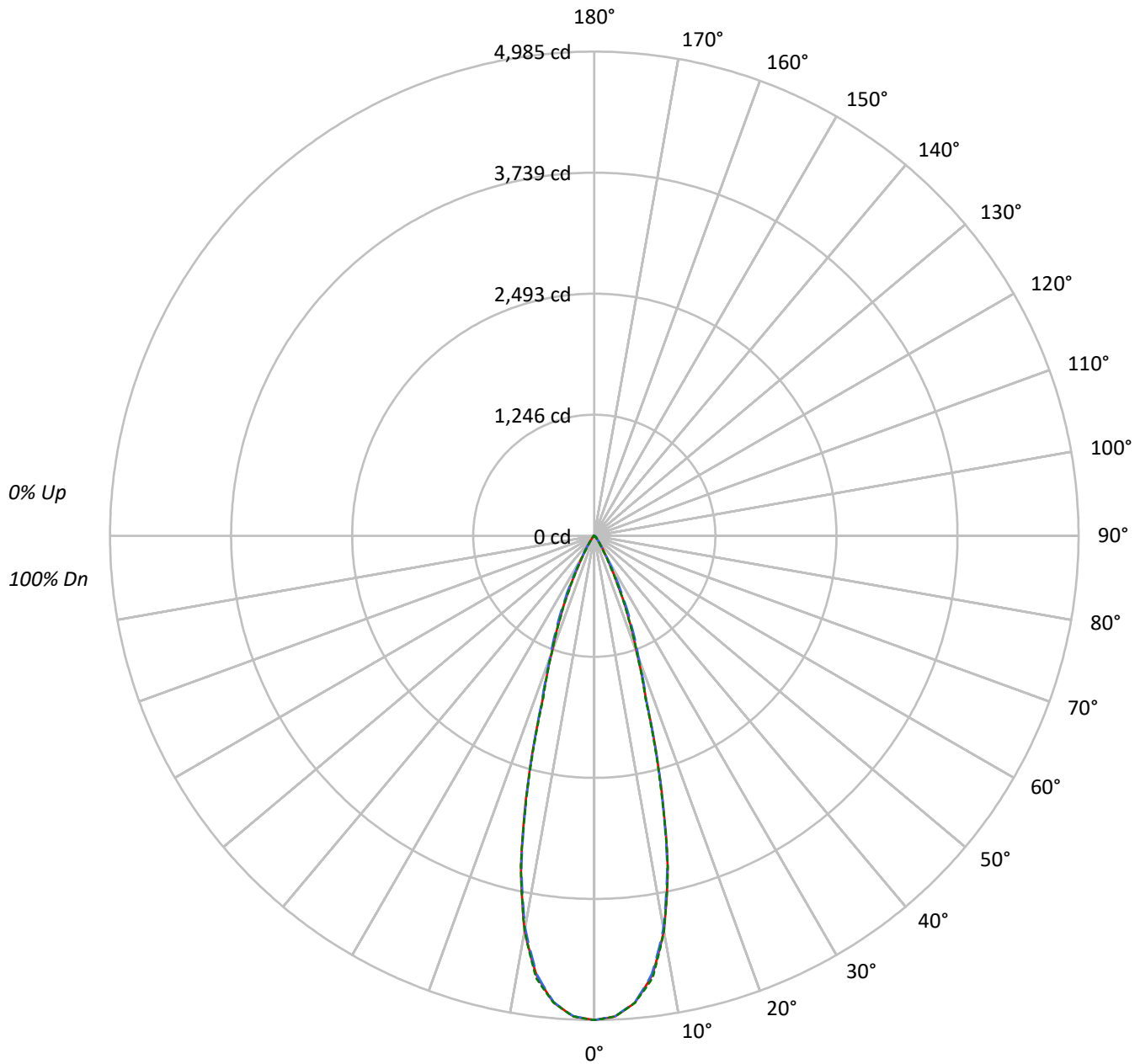
Downlight



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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°	381599	381599	381599
5°	370640	370210	370663
10°	321032	318770	320954
15°	209464	208331	207285
20°	104158	108059	104011
25°	52464	59162	51392
30°	21009	22892	18304
35°	9746	9335	7821
40°	4207	4676	3957
45°	2966	3680	2998
50°	1024	2679	1084
55°	587	1108	614
60°	413	490	413
65°	272	272	272
70°	157	112	157
75°	0	59	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 3680 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.4	28.3
10°-20°	706.0	45.5
20°-30°	305.1	19.7
30°-40°	69.5	4.5
40°-50°	23.9	1.5
50°-60°	5.8	0.4
60°-70°	1.5	0.1
70°-80°	0.1	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°	1449.5	93.5
0°-40°	1519.1	98.0
0°-60°	1548.8	99.9
0°-90°	1550.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1550.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4985	4985	4985	4985	4985	
5°	4824	4819	4818	4828	4824	439
15°	2643	2611	2629	2620	2616	708
25°	621	645	700	628	608	297
35°	104	106	100	99	84	71
45°	27	34	34	34	28	19
55°	4	5	8	5	5	4
65°	2	2	2	2	2	1
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°	4985.4	4985.4	4985.4	4985.4	4985.4
2.5°	4952.4	4948.9	4950.9	4953.3	4954.3
5°	4823.8	4819.2	4818.2	4828.3	4824.1
7.5°	4564.6	4558.1	4548.0	4570.8	4592.1
10°	4130.4	4123.1	4101.3	4112.1	4129.4
12.5°	3489.4	3465.7	3465.1	3499.4	3494.8
15°	2643.3	2611.4	2629.0	2620.4	2615.8
17.5°	1777.5	1765.3	1788.8	1781.6	1751.1
20°	1278.7	1281.9	1326.6	1304.1	1276.9
22.5°	933.1	944.6	997.7	939.6	918.4
25°	621.2	644.7	700.5	628.3	608.5
27.5°	382.1	392.9	449.4	377.2	366.4
30°	237.7	232.3	259.0	222.2	207.1
32.5°	155.9	149.1	157.6	141.5	129.3
35°	104.3	106.5	99.9	99.1	83.7
37.5°	65.1	74.9	66.1	70.5	53.9
40°	42.1	54.3	46.8	51.6	39.6
42.5°	34.5	41.9	38.4	40.9	35.2
45°	27.4	34.0	34.0	34.0	27.7
47.5°	15.2	22.7	29.1	23.3	16.2
50°	8.6	11.5	22.5	12.0	9.1
52.5°	5.9	6.6	15.4	6.9	6.1
55°	4.4	4.6	8.3	4.9	4.6
57.5°	3.4	3.7	4.4	3.7	3.4
60°	2.7	2.7	3.2	2.9	2.7
62.5°	1.9	1.9	2.2	1.9	1.9
65°	1.5	1.5	1.5	1.5	1.5
67.5°	0.7	1.0	1.0	1.0	1.0
70°	0.7	0.5	0.5	0.5	0.7
72.5°	0.5	0.2	0.2	0.2	0.2
75°	0.0	0.0	0.2	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)