

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: P780180

Luminaire Tested: LER4D20D010-EC4DR3020359030-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780180
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-EC4DR3020359030-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1777.1 lumens
Efficiency: N/A
Efficacy: 76.9 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



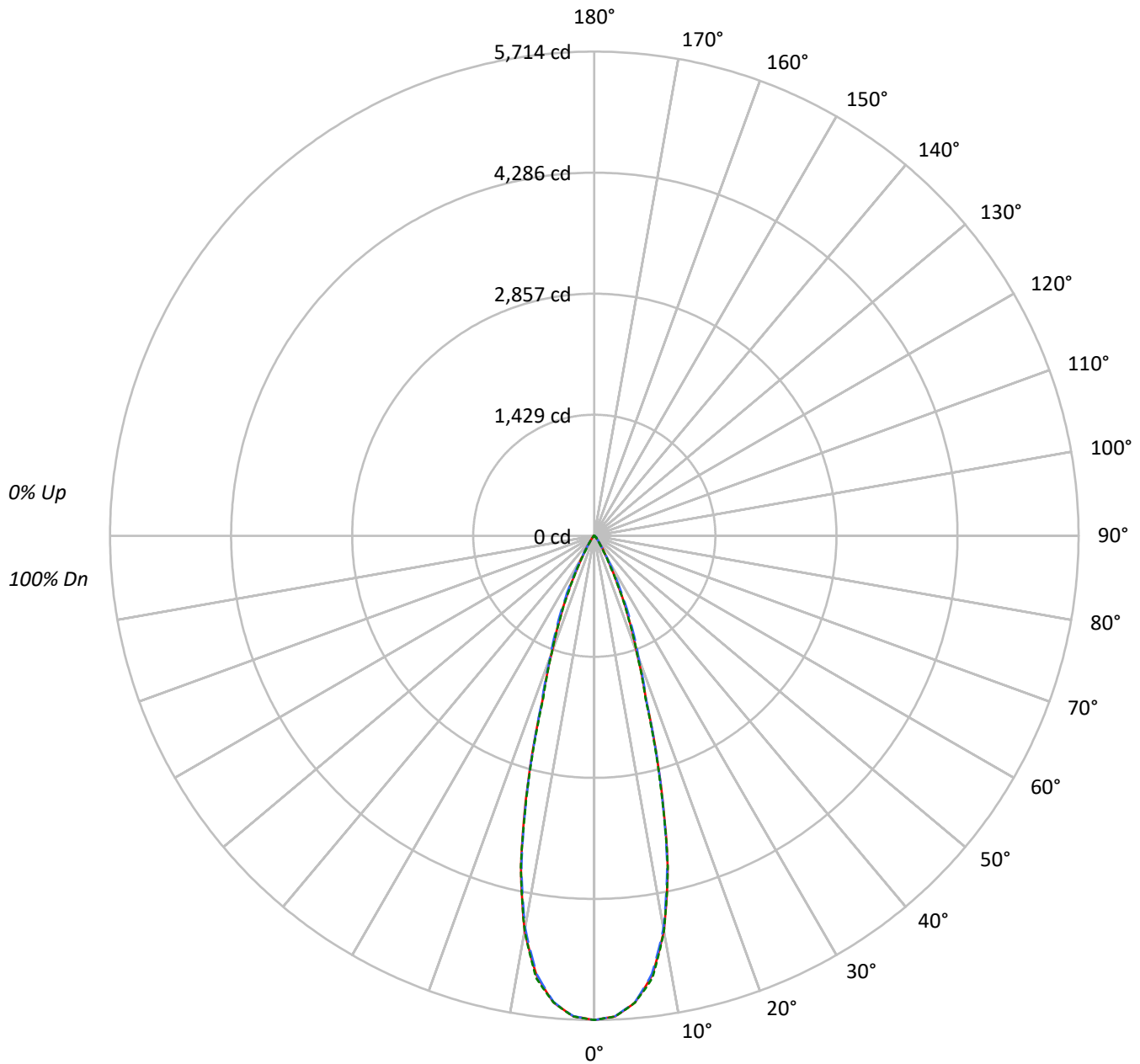
Downlight



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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°	437400	437400	437400
5°	424840	424341	424863
10°	367977	365381	367892
15°	240084	238793	237596
20°	119382	123862	119227
25°	60141	67810	58908
30°	24076	26233	20983
35°	11166	10699	8970
40°	4816	5356	4536
45°	3399	4222	3431
50°	1167	3072	1238
55°	667	1268	707
60°	475	566	475
65°	308	308	308
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: 4222 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	502.5	28.3
10°-20°	809.3	45.5
20°-30°	349.7	19.7
30°-40°	79.7	4.5
40°-50°	27.4	1.5
50°-60°	6.7	0.4
60°-70°	1.7	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°	1661.5	93.5
0°-40°	1741.2	98.0
0°-60°	1775.2	99.9
0°-90°	1777.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1777.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5714	5714	5714	5714	5714	
5°	5529	5524	5523	5534	5530	503
15°	3030	2993	3013	3004	2998	811
25°	712	739	803	720	698	341
35°	120	122	114	114	96	81
45°	31	39	39	39	32	22
55°	5	5	10	6	5	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°	5714.4	5714.4	5714.4	5714.4	5714.4
2.5°	5676.5	5672.6	5674.8	5677.6	5678.7
5°	5529.2	5523.9	5522.7	5534.2	5529.5
7.5°	5232.1	5224.5	5213.0	5239.1	5263.5
10°	4734.4	4726.0	4701.0	4713.3	4733.3
12.5°	3999.6	3972.4	3971.8	4011.1	4005.8
15°	3029.7	2993.3	3013.4	3003.6	2998.3
17.5°	2037.4	2023.4	2050.3	2042.2	2007.1
20°	1465.6	1469.3	1520.6	1494.8	1463.7
22.5°	1069.5	1082.6	1143.6	1077.0	1052.6
25°	712.1	739.0	802.9	720.2	697.5
27.5°	438.0	450.3	515.1	432.3	420.0
30°	272.4	266.3	296.8	254.7	237.4
32.5°	178.7	170.9	180.7	162.1	148.1
35°	119.5	122.0	114.5	113.6	96.0
37.5°	74.7	85.8	75.7	80.8	61.7
40°	48.2	62.3	53.6	59.2	45.4
42.5°	39.5	48.0	44.1	46.9	40.4
45°	31.4	39.0	39.0	39.0	31.7
47.5°	17.4	26.1	33.4	26.6	18.5
50°	9.8	13.2	25.8	13.8	10.4
52.5°	6.8	7.6	17.6	7.8	7.0
55°	5.0	5.3	9.5	5.6	5.3
57.5°	4.0	4.2	5.0	4.2	4.0
60°	3.1	3.1	3.7	3.4	3.1
62.5°	2.2	2.2	2.5	2.2	2.2
65°	1.7	1.7	1.7	1.7	1.7
67.5°	0.9	1.1	1.1	1.1	1.1
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)