

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: P780183

Luminaire Tested: LER4D20D010-EC4DR3020359030-4LBS1MW

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P780183
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-EC4DR3020359030-4LBS1MW
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1801.7 lumens
Efficiency: N/A
Efficacy: 78.0 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



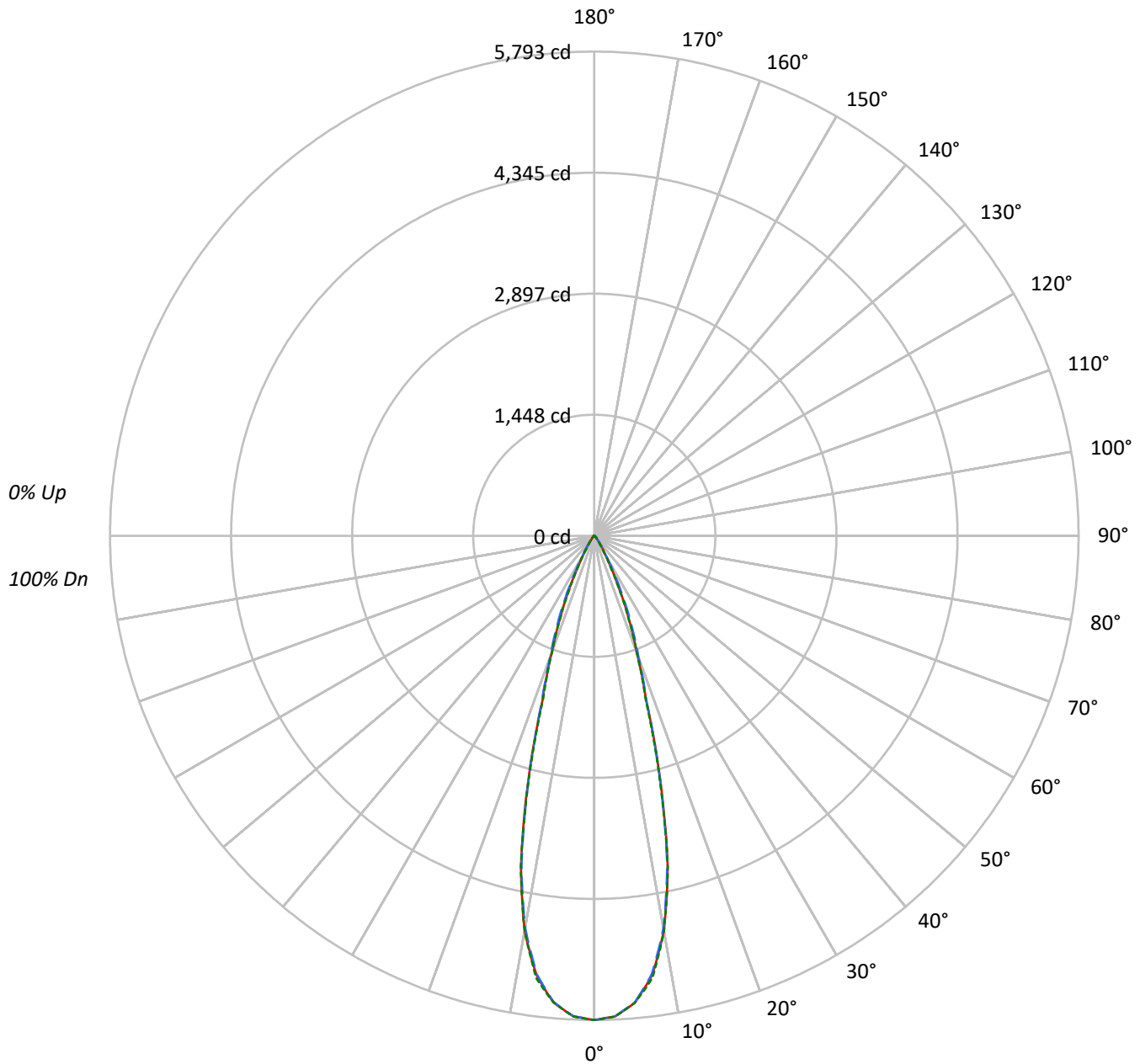
Downlight



TEST NUMBER: P780183

CATALOG NUMBER: LER4D20D010-EC4DR3020359030-4LBS1MW

Luminous Intensity Polar Plot





TEST NUMBER: P780183

CATALOG NUMBER: LER4D20D010-EC4DR3020359030-4LBS1MW

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°	443447	443447	443447
5°	430718	430219	430741
10°	373068	370434	372975
15°	243405	242097	240885
20°	121035	125572	120872
25°	60969	68747	59719
30°	24412	26595	21265
35°	11325	10839	9092
40°	4886	5426	4606
45°	3453	4276	3475
50°	1191	3120	1250
55°	681	1294	721
60°	490	566	490
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: 4276 cd/sqm



TEST NUMBER: P780183

CATALOG NUMBER: LER4D20D010-EC4DR3020359030-4LBS1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	509.4	28.3
10°-20°	820.5	45.5
20°-30°	354.5	19.7
30°-40°	80.8	4.5
40°-50°	27.7	1.5
50°-60°	6.8	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°	1684.5	93.5
0°-40°	1765.3	98.0
0°-60°	1799.8	99.9
0°-90°	1801.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1801.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5793	5793	5793	5793	5793	
5°	5606	5600	5599	5611	5606	510
15°	3072	3035	3055	3045	3040	822
25°	722	749	814	730	707	346
35°	121	124	116	115	97	82
45°	32	40	40	40	32	23
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	



TEST NUMBER: P780183

CATALOG NUMBER: LER4D20D010-EC4DR3020359030-4LBS1MW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5793.4	5793.4	5793.4	5793.4	5793.4
2.5°	5755.0	5751.1	5753.3	5756.2	5757.3
5°	5605.7	5600.3	5599.2	5610.9	5606.0
7.5°	5304.5	5296.8	5285.1	5311.6	5336.3
10°	4799.9	4791.4	4766.0	4778.6	4798.7
12.5°	4054.9	4027.3	4026.8	4066.6	4061.2
15°	3071.6	3034.7	3055.1	3045.2	3039.8
17.5°	2065.6	2051.4	2078.7	2070.4	2034.9
20°	1485.9	1489.6	1541.6	1515.5	1483.9
22.5°	1084.3	1097.7	1159.4	1091.9	1067.2
25°	721.9	749.2	814.0	730.2	707.1
27.5°	444.0	456.5	522.2	438.3	425.8
30°	276.2	269.9	300.9	258.3	240.6
32.5°	181.2	173.2	183.2	164.4	150.2
35°	121.2	123.8	116.0	115.2	97.3
37.5°	75.7	87.0	76.8	81.9	62.6
40°	48.9	63.1	54.3	60.0	46.1
42.5°	40.1	48.6	44.6	47.5	41.0
45°	31.9	39.5	39.5	39.5	32.1
47.5°	17.6	26.5	33.9	27.0	18.8
50°	10.0	13.3	26.2	13.9	10.5
52.5°	6.8	7.7	17.9	8.0	7.1
55°	5.1	5.4	9.7	5.7	5.4
57.5°	4.0	4.2	5.1	4.2	4.0
60°	3.2	3.2	3.7	3.4	3.2
62.5°	2.3	2.3	2.6	2.3	2.3
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)