

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: P781228

Luminaire Tested: LER4D40BD010-EC4DR3040509024-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781228
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: LER4D40BD010-EC4DR3040509024-4LBS1B
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: 3106.8 lumens
Efficiency: N/A
Efficacy: 88.3 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): 35.2
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

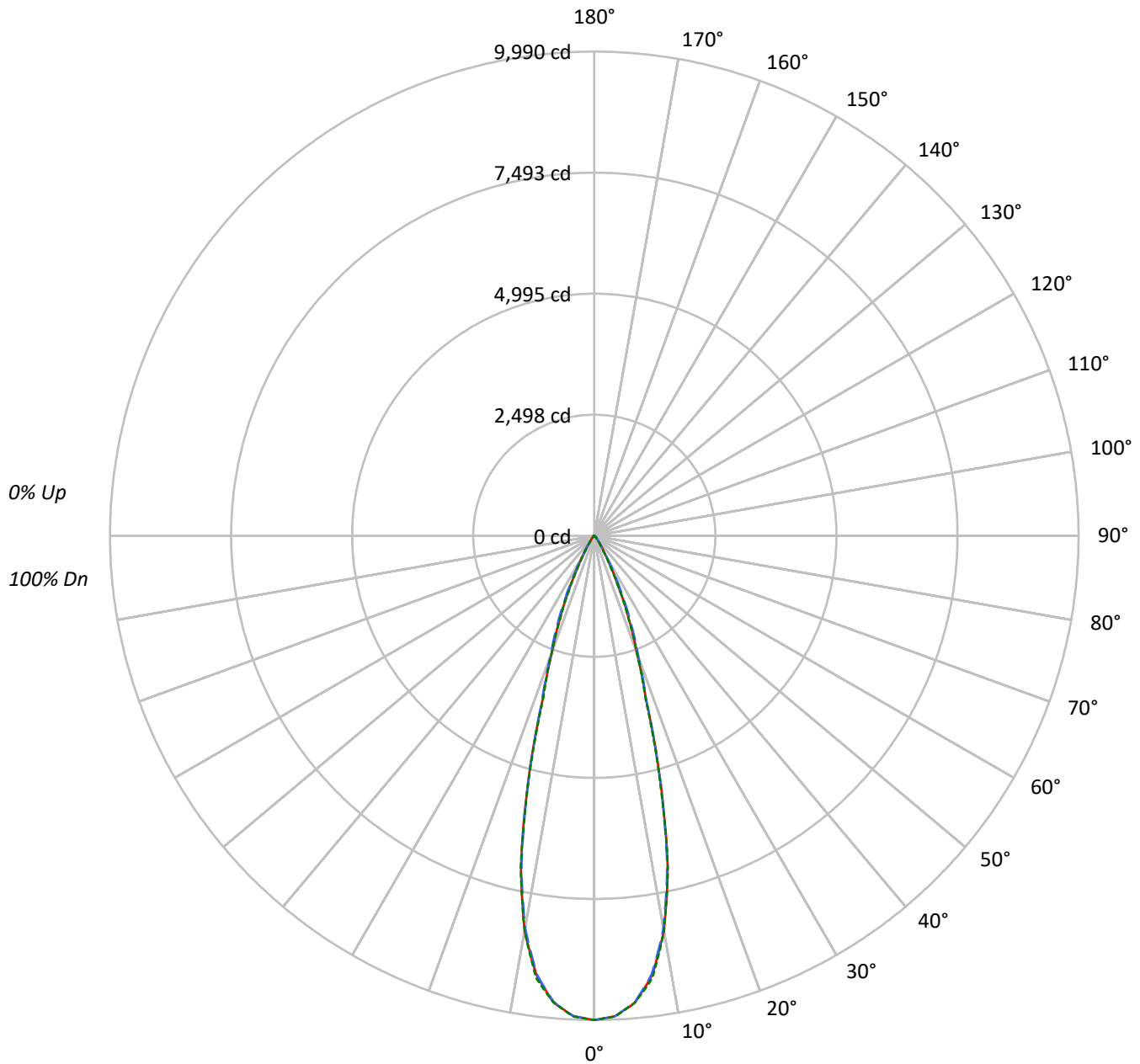


Downlight

TEST NUMBER: P781228

CATALOG NUMBER: LER4D40BD010-EC4DR3040509024-4LBS1B

Luminous Intensity Polar Plot



TEST NUMBER: P781228

CATALOG NUMBER: LER4D40BD010-EC4DR3040509024-4LBS1B

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°	764646	764646	764646
5°	742695	741826	742733
10°	643284	638753	643137
15°	419713	417455	415363
20°	208706	216534	208421
25°	105131	118551	102978
30°	42089	45863	36671
35°	19520	18698	15670
40°	8433	9363	7944
45°	5943	7383	5997
50°	2048	5371	2155
55°	1174	2229	1241
60°	827	980	827
65°	525	525	525
70°	336	224	336
75°	0	148	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 7383 cd/sqm



TEST NUMBER: P781228

CATALOG NUMBER: LER4D40BD010-EC4DR3040509024-4LBS1B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	878.4	28.3
10°-20°	1414.7	45.5
20°-30°	611.3	19.7
30°-40°	139.3	4.5
40°-50°	47.9	1.5
50°-60°	11.7	0.4
60°-70°	3.0	0.1
70°-80°	0.3	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°	2904.5	93.5
0°-40°	3043.9	98.0
0°-60°	3103.4	99.9
0°-90°	3106.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3106.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9990	9990	9990	9990	9990	
5°	9666	9657	9655	9675	9666	879
15°	5296	5233	5268	5251	5242	1418
25°	1245	1292	1404	1259	1219	596
35°	209	213	200	199	168	142
45°	55	68	68	68	55	39
55°	9	9	17	10	9	9
65°	3	3	3	3	3	3
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

TEST NUMBER: P781228

CATALOG NUMBER: LER4D40BD010-EC4DR3040509024-4LBS1B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9989.7	9989.7	9989.7	9989.7	9989.7
2.5°	9923.5	9916.6	9920.6	9925.5	9927.4
5°	9666.0	9656.7	9654.7	9674.8	9666.5
7.5°	9146.6	9133.4	9113.3	9158.9	9201.5
10°	8276.5	8261.8	8218.2	8239.7	8274.6
12.5°	6992.0	6944.4	6943.5	7012.1	7002.8
15°	5296.5	5232.7	5268.0	5250.9	5241.6
17.5°	3561.7	3537.2	3584.3	3570.1	3508.8
20°	2562.2	2568.5	2658.3	2613.2	2558.7
22.5°	1869.6	1892.7	1999.1	1882.9	1840.2
25°	1244.8	1291.9	1403.7	1259.0	1219.3
27.5°	765.6	787.2	900.5	755.8	734.2
30°	476.2	465.4	518.9	445.3	414.9
32.5°	312.4	298.7	315.9	283.5	259.0
35°	208.9	213.4	200.1	198.6	167.7
37.5°	130.5	150.1	132.4	141.3	107.9
40°	84.4	108.9	93.7	103.5	79.5
42.5°	69.2	83.9	77.0	81.9	70.6
45°	54.9	68.2	68.2	68.2	55.4
47.5°	30.4	45.6	58.4	46.6	32.4
50°	17.2	23.1	45.1	24.0	18.1
52.5°	11.8	13.2	30.9	13.7	12.3
55°	8.8	9.3	16.7	9.8	9.3
57.5°	6.9	7.4	8.8	7.4	6.9
60°	5.4	5.4	6.4	5.9	5.4
62.5°	3.9	3.9	4.4	3.9	3.9
65°	2.9	2.9	2.9	2.9	2.9
67.5°	1.5	2.0	2.0	2.0	2.0
70°	1.5	1.0	1.0	1.0	1.5
72.5°	1.0	0.5	0.5	0.5	0.5
75°	0.0	0.0	0.5	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)