

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: P781490

Luminaire Tested: LER4D45BD010-EC4DR3040509050-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781490
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: LER4D45BD010-EC4DR3040509050-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4738.2 lumens
Efficiency: N/A
Efficacy: 122.4 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): 38.7
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

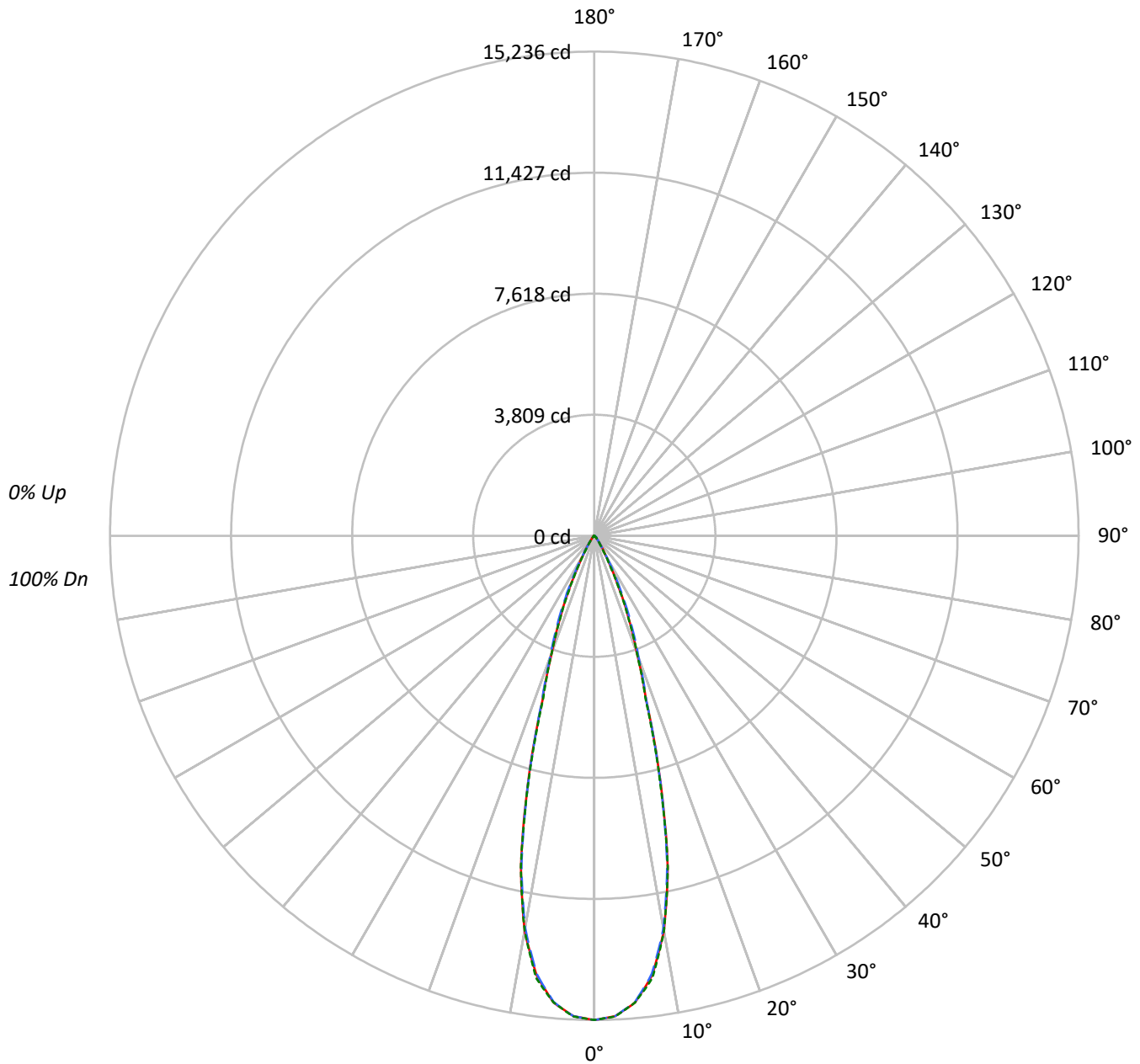


Downlight

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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	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°	1166200	1166200	1166200
5°	1132721	1131399	1132775
10°	981105	974187	980872
15°	640122	636682	633481
20°	318305	330246	317873
25°	160340	180804	157055
30°	64194	69948	55930
35°	29780	28519	23903
40°	12860	14279	12110
45°	9071	11258	9147
50°	3120	8193	3299
55°	1802	3390	1895
60°	1255	1485	1255
65°	815	815	815
70°	492	336	492
75°	0	207	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 11258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1339.8	28.3
10°-20°	2157.7	45.5
20°-30°	932.4	19.7
30°-40°	212.5	4.5
40°-50°	73.0	1.5
50°-60°	17.8	0.4
60°-70°	4.6	0.1
70°-80°	0.5	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°	4429.8	93.5
0°-40°	4642.4	98.0
0°-60°	4733.2	99.9
0°-90°	4738.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4738.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15236	15236	15236	15236	15236	
5°	14742	14728	14725	14756	14743	1341
15°	8078	7981	8034	8008	7994	2163
25°	1898	1970	2141	1920	1860	909
35°	319	325	305	303	256	216
45°	84	104	104	104	84	59
55°	14	14	25	15	14	13
65°	4	4	4	4	4	4
75°	0	0	1	0	0	1
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°	15235.8	15235.8	15235.8	15235.8	15235.8
2.5°	15134.8	15124.3	15130.3	15137.8	15140.8
5°	14742.1	14727.8	14724.9	14755.5	14742.8
7.5°	13949.9	13929.7	13899.0	13968.6	14033.7
10°	12622.9	12600.5	12533.9	12566.8	12619.9
12.5°	10663.8	10591.3	10589.8	10694.5	10680.3
15°	8077.9	7980.7	8034.5	8008.3	7994.1
17.5°	5432.2	5394.8	5466.6	5444.9	5351.4
20°	3907.7	3917.4	4054.3	3985.5	3902.4
22.5°	2851.5	2886.6	3048.9	2871.7	2806.6
25°	1898.5	1970.3	2140.8	1920.2	1859.6
27.5°	1167.7	1200.6	1373.4	1152.7	1119.8
30°	726.3	709.9	791.4	679.2	632.8
32.5°	476.5	455.5	481.7	432.4	395.0
35°	318.7	325.4	305.2	302.9	255.8
37.5°	199.0	228.9	202.0	215.4	164.6
40°	128.7	166.1	142.9	157.8	121.2
42.5°	105.5	127.9	117.4	124.9	107.7
45°	83.8	104.0	104.0	104.0	84.5
47.5°	46.4	69.6	89.0	71.1	49.4
50°	26.2	35.2	68.8	36.7	27.7
52.5°	18.0	20.2	47.1	20.9	18.7
55°	13.5	14.2	25.4	15.0	14.2
57.5°	10.5	11.2	13.5	11.2	10.5
60°	8.2	8.2	9.7	9.0	8.2
62.5°	6.0	6.0	6.7	6.0	6.0
65°	4.5	4.5	4.5	4.5	4.5
67.5°	2.2	3.0	3.0	3.0	3.0
70°	2.2	1.5	1.5	1.5	2.2
72.5°	1.5	0.7	0.7	0.7	0.7
75°	0.0	0.0	0.7	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)