

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: P781474

Luminaire Tested: LER4D45BD010-EC4DR3040509027-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P781474
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-EC4DR3040509027-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4317.2 lumens
Efficiency: N/A
Efficacy: 111.6 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

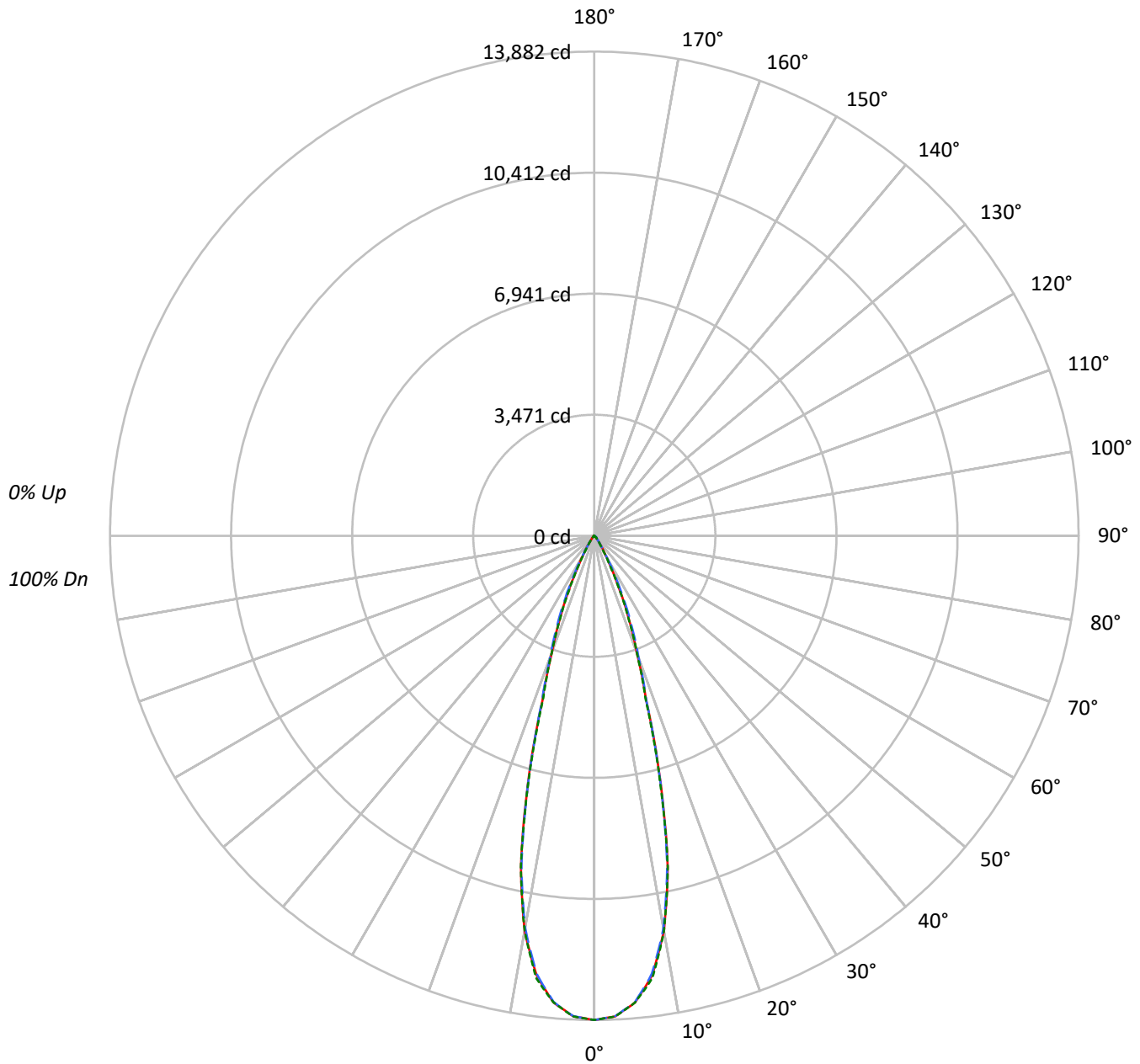


Downlight

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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96		
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92		
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89		
4	103	98	93	90	102	96	93	90	94	91	89	93	90	88	91	89	87	85		
5	100	94	89	86	98	93	89	86	91	88	85	90	86	84	88	86	83	82		
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79		
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77		
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74		
9	88	81	76	73	87	80	76	73	80	76	73	79	75	73	78	75	73	72		
10	85	78	74	71	85	78	74	71	77	73	71	76	73	71	76	73	70	69		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1062568	1062568	1062568
5°	1032066	1030860	1032112
10°	893922	887618	893712
15°	583240	580110	577194
20°	290015	300898	289632
25°	146092	164740	143094
30°	58493	63734	50963
35°	27126	25986	21781
40°	11711	13010	11031
45°	8259	10251	8335
50°	2846	7466	3001
55°	1641	3096	1721
60°	1148	1362	1148
65°	743	743	743
70°	448	313	448
75°	0	207	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 10251 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1220.7	28.3
10°-20°	1966.0	45.5
20°-30°	849.5	19.7
30°-40°	193.6	4.5
40°-50°	66.5	1.5
50°-60°	16.2	0.4
60°-70°	4.2	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°	4036.2	93.5
0°-40°	4229.8	98.0
0°-60°	4312.5	99.9
0°-90°	4317.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4317.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13882	13882	13882	13882	13882	
5°	13432	13419	13416	13444	13433	1222
15°	7360	7272	7321	7297	7284	1971
25°	1730	1795	1951	1750	1694	828
35°	290	296	278	276	233	197
45°	76	95	95	95	77	54
55°	12	13	23	14	13	12
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°	13881.9	13881.9	13881.9	13881.9	13881.9
2.5°	13789.9	13780.3	13785.8	13792.6	13795.3
5°	13432.1	13419.1	13416.4	13444.3	13432.7
7.5°	12710.3	12691.9	12664.0	12727.3	12786.6
10°	11501.2	11480.8	11420.1	11450.1	11498.5
12.5°	9716.2	9650.1	9648.8	9744.2	9731.2
15°	7360.1	7271.5	7320.6	7296.7	7283.8
17.5°	4949.4	4915.4	4980.8	4961.0	4875.8
20°	3560.4	3569.3	3694.0	3631.3	3555.7
22.5°	2598.1	2630.1	2778.0	2616.5	2557.2
25°	1729.8	1795.2	1950.6	1749.5	1694.3
27.5°	1063.9	1093.9	1251.3	1050.3	1020.3
30°	661.8	646.8	721.1	618.9	576.6
32.5°	434.1	415.1	438.9	393.9	359.9
35°	290.3	296.5	278.1	276.0	233.1
37.5°	181.3	208.6	184.0	196.3	149.9
40°	117.2	151.3	130.2	143.8	110.4
42.5°	96.1	116.5	107.0	113.8	98.1
45°	76.3	94.7	94.7	94.7	77.0
47.5°	42.3	63.4	81.1	64.7	45.0
50°	23.9	32.0	62.7	33.4	25.2
52.5°	16.4	18.4	42.9	19.1	17.0
55°	12.3	12.9	23.2	13.6	12.9
57.5°	9.5	10.2	12.3	10.2	9.5
60°	7.5	7.5	8.9	8.2	7.5
62.5°	5.5	5.5	6.1	5.5	5.5
65°	4.1	4.1	4.1	4.1	4.1
67.5°	2.0	2.7	2.7	2.7	2.7
70°	2.0	1.4	1.4	1.4	2.0
72.5°	1.4	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)