

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: P744168

Luminaire Tested: LD4D20D010-EU4DR3020359050-4LBS1MW

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P744168
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: LD4D20D010-EU4DR3020359050-4LBS1MW
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1931.6 lumens
Efficiency: N/A
Efficacy: 83.6 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): 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



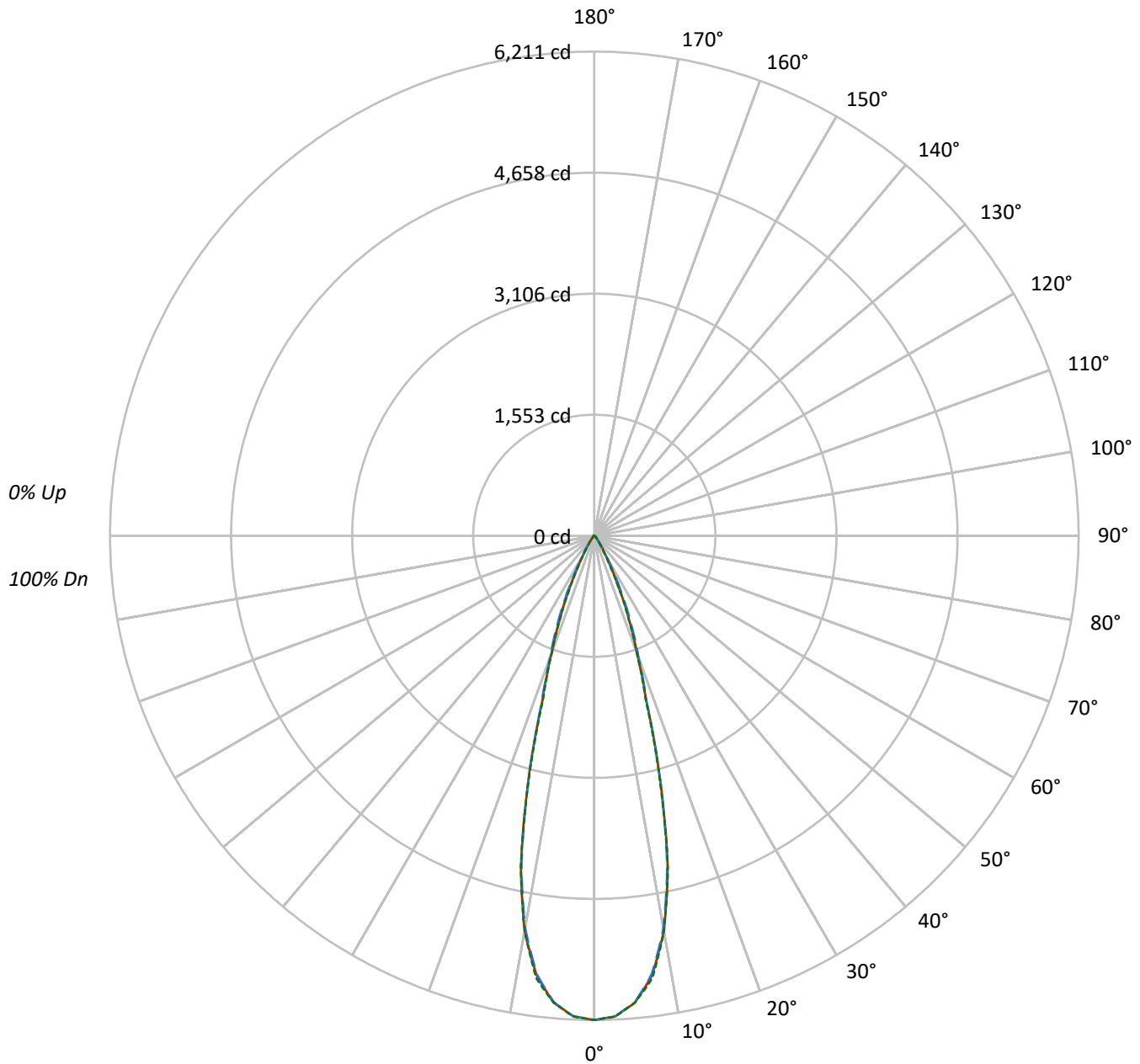
Downlight



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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					0
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°	475411	475411	475411
5°	461760	461222	461783
10°	399953	397132	399860
15°	260949	259546	258247
20°	129759	134630	129588
25°	65361	73705	64026
30°	26171	28513	22803
35°	12138	11624	9746
40°	5236	5825	4936
45°	3691	4590	3724
50°	1274	3346	1346
55°	734	1388	774
60°	520	612	520
65°	326	326	326
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: 4590 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	546.2	28.3
10°-20°	879.6	45.5
20°-30°	380.1	19.7
30°-40°	86.6	4.5
40°-50°	29.7	1.5
50°-60°	7.3	0.4
60°-70°	1.9	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°	1805.9	93.5
0°-40°	1892.5	98.0
0°-60°	1929.5	99.9
0°-90°	1931.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1931.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6211	6211	6211	6211	6211	
5°	6010	6004	6003	6015	6010	547
15°	3293	3253	3275	3265	3259	882
25°	774	803	873	783	758	370
35°	130	133	124	124	104	88
45°	34	42	42	42	34	24
55°	6	6	10	6	6	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°	6211.0	6211.0	6211.0	6211.0	6211.0
2.5°	6169.8	6165.5	6168.0	6171.0	6172.2
5°	6009.7	6004.0	6002.7	6015.2	6010.0
7.5°	5686.8	5678.6	5666.0	5694.4	5720.9
10°	5145.8	5136.7	5109.5	5123.0	5144.6
12.5°	4347.2	4317.6	4317.0	4359.7	4353.9
15°	3293.0	3253.4	3275.3	3264.7	3258.9
17.5°	2214.5	2199.2	2228.5	2219.7	2181.5
20°	1593.0	1597.0	1652.8	1624.7	1590.9
22.5°	1162.4	1176.8	1242.9	1170.7	1144.1
25°	773.9	803.2	872.7	782.8	758.1
27.5°	476.0	489.4	559.9	469.9	456.5
30°	296.1	289.4	322.6	276.9	258.0
32.5°	194.2	185.7	196.4	176.2	161.0
35°	129.9	132.6	124.4	123.5	104.3
37.5°	81.1	93.3	82.3	87.8	67.1
40°	52.4	67.7	58.3	64.3	49.4
42.5°	43.0	52.1	47.9	50.9	43.9
45°	34.1	42.4	42.4	42.4	34.4
47.5°	18.9	28.4	36.3	29.0	20.1
50°	10.7	14.3	28.1	15.0	11.3
52.5°	7.3	8.3	19.2	8.5	7.6
55°	5.5	5.8	10.4	6.1	5.8
57.5°	4.3	4.6	5.5	4.6	4.3
60°	3.4	3.4	4.0	3.7	3.4
62.5°	2.5	2.5	2.8	2.5	2.5
65°	1.8	1.8	1.8	1.8	1.8
67.5°	0.9	1.2	1.2	1.2	1.2
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)