

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: P744164

Luminaire Tested: LD4D20D010-EU4DR3020359050-4LBDP1MW

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P744164
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-EU4DR3020359050-4LBDP1MW
Description: 4 INCH ROUND DEEP 45° CUTOFF 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: 1722.1 lumens
Efficiency: N/A
Efficacy: 74.5 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



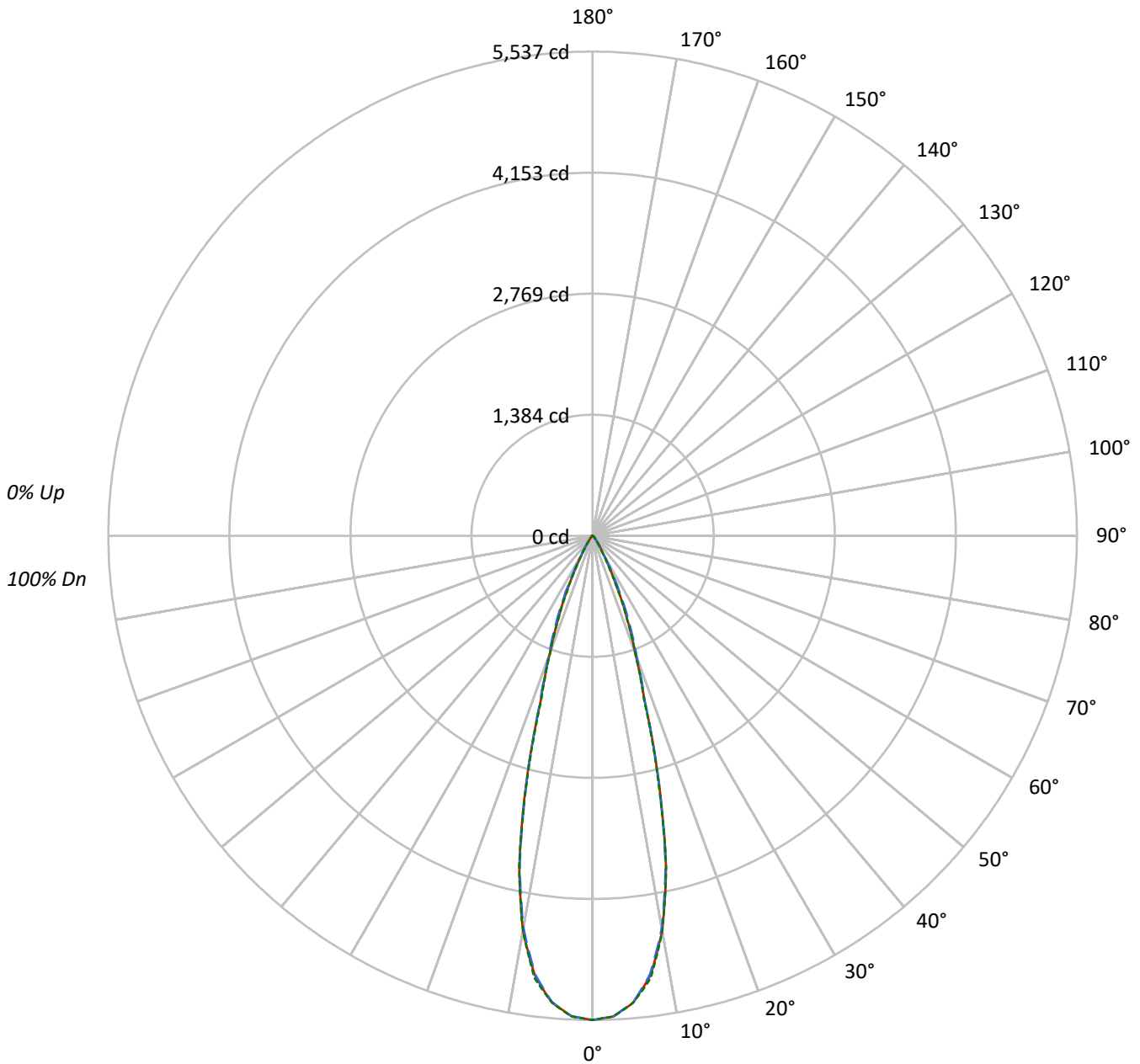
Downlight



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
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°	423844	423844	423844
5°	411678	411194	411701
10°	356575	354065	356490
15°	232651	231399	230234
20°	115683	120025	115529
25°	58275	65715	57084
30°	23334	25419	20328
35°	10821	10363	8690
40°	4676	5186	4406
45°	3291	4092	3323
50°	1131	2977	1203
55°	654	1228	694
60°	459	551	459
65°	290	290	290
70°	179	112	179
75°	0	89	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 4092 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	486.9	28.3
10°-20°	784.2	45.5
20°-30°	338.9	19.7
30°-40°	77.2	4.5
40°-50°	26.5	1.5
50°-60°	6.5	0.4
60°-70°	1.7	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°	1610.0	93.5
0°-40°	1687.2	98.0
0°-60°	1720.2	99.9
0°-90°	1722.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1722.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5537	5537	5537	5537	5537	
5°	5358	5353	5352	5363	5358	487
15°	2936	2900	2920	2911	2905	786
25°	690	716	778	698	676	330
35°	116	118	111	110	93	79
45°	30	38	38	38	31	22
55°	5	5	9	5	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5537.3	5537.3	5537.3	5537.3	5537.3
2.5°	5500.6	5496.8	5499.0	5501.7	5502.8
5°	5357.9	5352.7	5351.6	5362.8	5358.2
7.5°	5070.0	5062.7	5051.5	5076.8	5100.5
10°	4587.7	4579.5	4555.4	4567.3	4586.6
12.5°	3875.7	3849.3	3848.8	3886.8	3881.7
15°	2935.9	2900.5	2920.1	2910.6	2905.4
17.5°	1974.3	1960.7	1986.8	1978.9	1944.9
20°	1420.2	1423.7	1473.5	1448.5	1418.3
22.5°	1036.4	1049.1	1108.1	1043.7	1020.0
25°	690.0	716.1	778.1	697.9	675.9
27.5°	424.4	436.4	499.2	418.9	407.0
30°	264.0	258.0	287.6	246.8	230.0
32.5°	173.2	165.6	175.1	157.2	143.5
35°	115.8	118.3	110.9	110.1	93.0
37.5°	72.3	83.2	73.4	78.3	59.8
40°	46.8	60.3	51.9	57.4	44.1
42.5°	38.3	46.5	42.7	45.4	39.1
45°	30.4	37.8	37.8	37.8	30.7
47.5°	16.8	25.3	32.4	25.8	17.9
50°	9.5	12.8	25.0	13.3	10.1
52.5°	6.5	7.3	17.1	7.6	6.8
55°	4.9	5.2	9.2	5.4	5.2
57.5°	3.8	4.1	4.9	4.1	3.8
60°	3.0	3.0	3.6	3.3	3.0
62.5°	2.2	2.2	2.5	2.2	2.2
65°	1.6	1.6	1.6	1.6	1.6
67.5°	0.8	1.1	1.1	1.1	1.1
70°	0.8	0.5	0.5	0.5	0.8
72.5°	0.5	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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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