

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: IRiS

Report Number: P1334628

Luminaire Tested: P3A02R259024DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334628
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R259024DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 2400K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

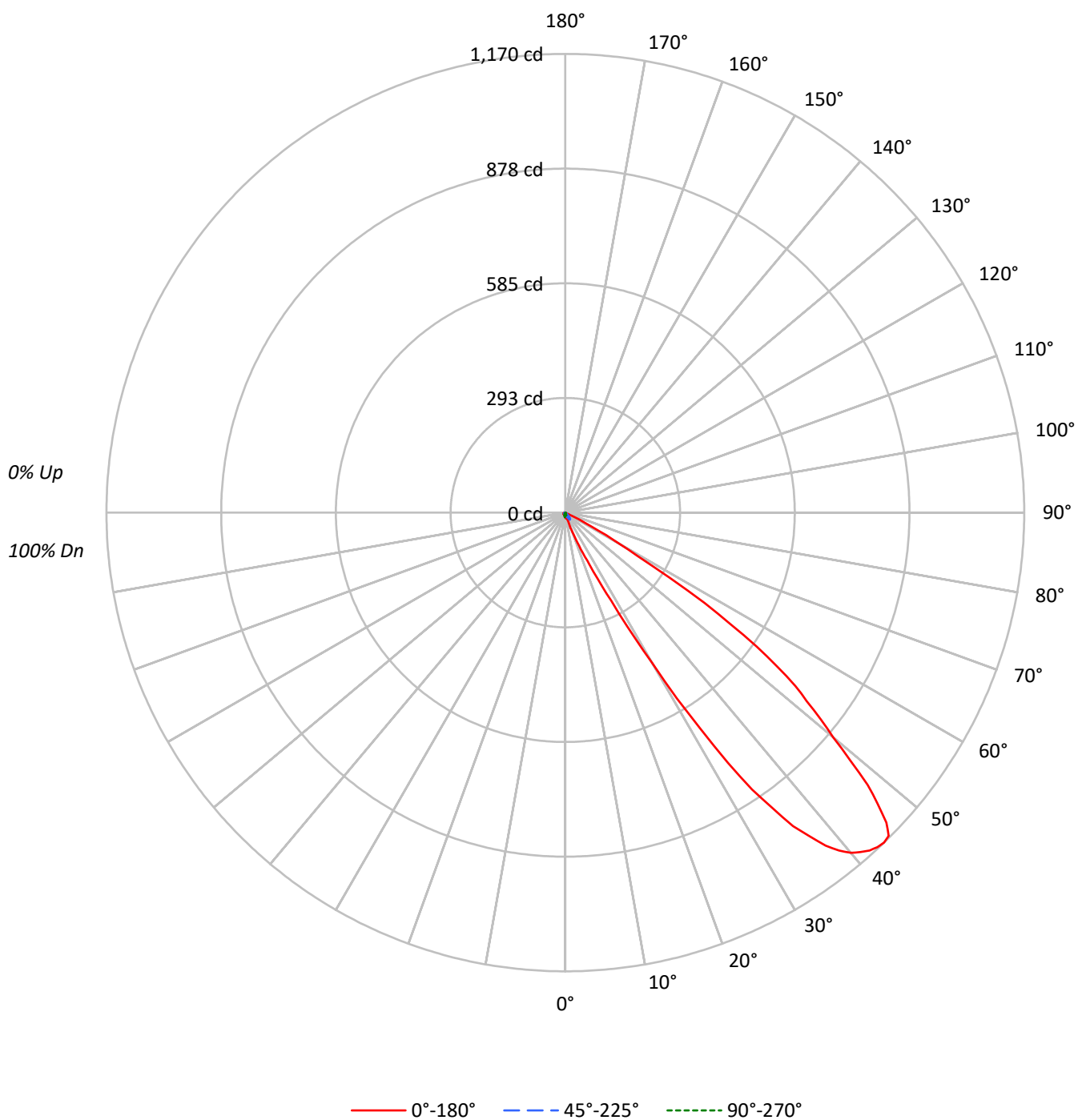
Lumens per Lamp: N/A
Luminaire Lumens: 244.0 lumens
Efficiency: N/A
Efficacy: 67.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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

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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			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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2741	2741	2741	2741	2741
5°	3126	2972	2641	2355	2311
10°	3117	2828	2249	1959	1959
15°	3451	2429	1748	1657	1748
20°	12228	2404	1353	1400	1563
25°	35179	3073	1089	1307	1500
30°	112220	4735	861	1241	1519
35°	245768	5568	750	1205	1553
40°	324207	5038	601	1231	1660
45°	361557	3535	589	1333	1799
50°	304331	1842	580	1399	1979
55°	227547	726	573	1567	2217
60°	70433	175	570	1710	2456
65°	6019	0	675	1764	2698
70°	385	128	705	2052	3013
75°	339	169	932	2203	3474
80°	253	253	1389	2399	4041
85°	503	503	2264	2768	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 361557 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.1	0.5
10°-20°	2.9	1.2
20°-30°	13.5	5.5
30°-40°	65.0	26.6
40°-50°	101.9	41.8
50°-60°	52.2	21.4
60°-70°	4.9	2.0
70°-80°	1.7	0.7
80°-90°	0.8	0.3
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°	17.5	7.2
0°-40°	82.5	33.8
0°-60°	236.6	97.0
0°-90°	244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	244.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	14	14	12	11	10	1
15°	15	11	8	7	8	6
25°	145	13	4	5	6	90
35°	918	21	3	4	6	557
45°	1166	11	2	4	6	853
55°	595	2	2	4	6	495
65°	12	0	1	3	5	36
75°	0	0	1	3	4	0
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
2.5°	13.5	13.5	13.5	13.5	13.5	13.5	13.3	13.3	13.5	13.3	13.3
5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.0	14.0	14.0	13.5
7.5°	14.4	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.0	14.0	13.3
10°	14.0	14.0	14.0	14.0	13.7	13.7	13.7	13.5	13.5	13.5	12.7
12.5°	14.0	14.0	14.0	14.0	13.7	13.7	13.5	13.5	13.3	13.1	11.6
15°	15.2	15.2	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.5	10.7
17.5°	22.3	21.7	21.5	20.6	19.5	18.5	17.6	16.7	15.9	15.2	10.3
20°	52.4	52.2	51.1	48.5	45.7	42.5	39.3	35.6	30.5	27.1	10.3
22.5°	90.8	89.5	87.6	85.7	80.7	74.9	68.9	62.1	55.4	48.3	11.0
25°	145.4	148.4	141.9	136.8	128.2	117.7	106.3	96.8	84.8	73.6	12.7
27.5°	252.7	254.7	242.0	225.2	205.3	183.2	161.7	145.6	125.4	106.9	15.9
30°	443.2	445.1	423.8	388.2	347.0	310.7	261.5	218.4	178.6	147.9	18.7
31°	553.1	538.1	513.4	478.8	426.6	371.9	312.8	260.7	210.4	170.1	19.5
32°	648.7	647.4	618.6	566.2	513.8	446.2	373.0	304.9	243.3	192.4	20.2
33°	761.4	752.8	712.2	662.8	593.5	525.4	430.9	353.2	277.0	217.3	20.6
34°	851.8	828.6	811.8	755.4	682.1	595.4	494.3	404.3	319.1	241.3	20.8
35°	918.1	913.2	880.5	827.9	753.4	664.8	562.6	457.3	354.3	269.3	20.8
36°	988.3	973.1	941.3	893.6	821.1	729.4	614.7	503.3	395.3	294.4	20.6
37°	1032.3	1023.3	991.8	942.6	871.5	783.9	673.1	551.8	427.9	319.5	20.2
38°	1077.7	1059.4	1028.3	981.2	911.5	829.2	715.4	589.2	458.0	341.6	19.5
39°	1109.0	1090.1	1058.3	1011.5	943.2	861.6	748.9	621.0	484.2	358.1	18.7
40°	1132.6	1114.4	1082.2	1034.1	966.6	887.2	776.8	649.1	506.1	372.5	17.6
41°	1147.2	1130.3	1098.3	1050.4	982.7	901.8	795.1	667.3	520.9	382.2	16.5
42°	1159.5	1142.1	1109.4	1060.5	992.6	914.3	806.3	678.9	531.0	387.1	15.7
43°	1166.3	1148.9	1117.2	1067.1	998.6	920.1	812.3	684.3	534.4	386.5	14.2
44°	1170.2	1152.2	1120.2	1070.1	1001.2	921.6	812.7	683.2	532.1	381.3	12.9
45°	1165.9	1148.1	1117.2	1067.1	996.7	916.8	808.4	677.4	523.0	371.2	11.4
46°	1138.0	1124.2	1095.9	1050.0	982.5	904.8	797.4	666.3	509.1	358.8	9.7
47°	1088.8	1077.9	1050.4	1016.2	955.3	882.7	777.3	645.0	489.5	340.1	7.7
48°	1037.5	1021.4	995.8	960.8	909.3	843.0	744.0	613.9	459.9	315.6	6.9
49°	961.7	952.3	929.7	890.6	847.9	789.5	697.0	573.9	423.6	289.0	6.0
50°	892.1	885.7	854.1	825.4	780.1	725.5	633.2	521.3	378.5	255.9	5.4
51°	837.8	830.1	807.3	771.5	723.2	659.8	572.9	453.0	326.8	216.6	4.3
52°	781.1	776.8	756.7	719.7	672.3	609.1	514.2	395.1	276.6	183.2	3.4
53°	734.8	728.5	703.8	671.0	619.7	554.4	450.7	341.2	234.3	154.0	3.0
54°	667.1	664.5	648.7	614.3	558.7	487.6	393.1	287.3	195.4	130.5	2.6
55°	595.2	586.6	570.5	543.2	492.1	425.8	326.6	238.1	158.0	109.9	1.9
56°	507.6	507.2	478.4	455.6	410.3	339.9	260.9	185.9	128.4	91.7	1.7
57°	423.8	410.3	382.6	360.1	311.3	257.9	193.7	139.3	100.5	74.3	1.3
58°	313.5	306.4	299.1	266.0	220.9	182.7	138.3	97.9	74.3	56.7	0.9
59°	212.8	212.6	204.0	178.9	152.9	113.8	86.3	66.6	51.1	41.7	0.6
60°	160.6	156.7	139.6	123.0	96.2	71.9	51.1	39.3	31.8	26.8	0.4
62.5°	56.3	58.4	51.3	42.5	32.4	26.6	20.4	16.5	13.5	11.0	0.0
65°	11.6	12.7	11.0	10.3	8.2	7.1	6.2	5.4	4.5	3.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	1.5	1.3	1.3	1.3	1.1	1.1	1.1	1.1	0.9	0.9	0.2
70°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.2
72.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
85°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	12.5	12.5	12.5	12.5	12.5	12.5
2.5°	13.1	12.7	12.0	11.8	11.6	11.6
5°	12.9	12.0	11.4	10.7	10.5	10.5
7.5°	12.2	11.2	10.3	9.9	9.7	9.4
10°	11.6	10.1	9.2	8.8	8.8	8.8
12.5°	10.3	9.0	8.2	7.9	8.2	8.2
15°	9.2	7.7	7.3	7.3	7.5	7.7
17.5°	7.9	6.9	6.4	6.7	6.9	7.1
20°	7.1	5.8	5.8	6.0	6.7	6.7
22.5°	6.2	5.2	5.2	5.8	6.2	6.4
25°	5.6	4.5	4.7	5.4	6.0	6.2
27.5°	4.7	3.9	4.3	5.2	5.8	6.0
30°	4.1	3.4	4.1	4.9	5.6	6.0
31°	3.9	3.2	4.1	4.7	5.6	6.0
32°	3.4	3.2	3.9	4.7	5.6	5.8
33°	3.2	3.0	3.9	4.7	5.6	5.8
34°	3.0	2.8	3.7	4.7	5.6	5.8
35°	2.6	2.8	3.7	4.5	5.4	5.8
36°	2.4	2.6	3.7	4.5	5.4	5.8
37°	2.1	2.6	3.4	4.5	5.4	5.8
38°	1.9	2.4	3.4	4.5	5.4	5.8
39°	1.7	2.4	3.2	4.5	5.4	5.8
40°	1.5	2.1	3.2	4.3	5.4	5.8
41°	1.5	2.1	3.2	4.3	5.4	5.8
42°	1.3	2.1	3.2	4.3	5.4	5.8
43°	1.1	1.9	3.2	4.3	5.4	5.8
44°	0.9	1.9	3.0	4.3	5.4	5.8
45°	0.9	1.9	3.0	4.3	5.4	5.8
46°	0.6	1.7	3.0	4.3	5.4	5.8
47°	0.4	1.7	3.0	4.1	5.4	5.8
48°	0.4	1.7	3.0	4.1	5.4	5.8
49°	0.4	1.7	2.8	4.1	5.4	5.8
50°	0.4	1.7	2.8	4.1	5.4	5.8
51°	0.2	1.5	2.8	4.1	5.4	5.8
52°	0.2	1.5	2.8	4.1	5.4	6.0
53°	0.2	1.5	2.8	4.1	5.4	5.8
54°	0.2	1.5	2.6	4.1	5.4	5.8
55°	0.2	1.5	2.6	4.1	5.4	5.8
56°	0.2	1.3	2.6	3.9	5.4	5.8
57°	0.4	1.3	2.6	3.9	5.4	5.6
58°	0.4	1.3	2.6	3.9	5.2	5.6
59°	0.4	1.3	2.6	3.9	5.2	5.6
60°	0.4	1.3	2.4	3.9	5.2	5.6
62.5°	0.4	1.3	2.4	3.7	4.9	5.4
65°	0.4	1.3	2.1	3.4	4.9	5.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.1	2.1	3.2	4.7	4.9
70°	0.6	1.1	1.9	3.2	4.5	4.7
72.5°	0.6	1.1	1.9	2.8	4.1	4.5
75°	0.6	1.1	1.7	2.6	3.9	4.1
77.5°	0.6	1.1	1.5	2.4	3.4	3.7
80°	0.9	1.1	1.3	1.9	3.0	3.2
82.5°	0.9	1.1	1.1	1.5	2.4	2.6
85°	0.6	0.9	0.9	1.1	1.5	1.7
87.5°	0.6	0.9	0.6	0.4	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)