

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: P1335350

Luminaire Tested: P3A02R359035DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359035DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

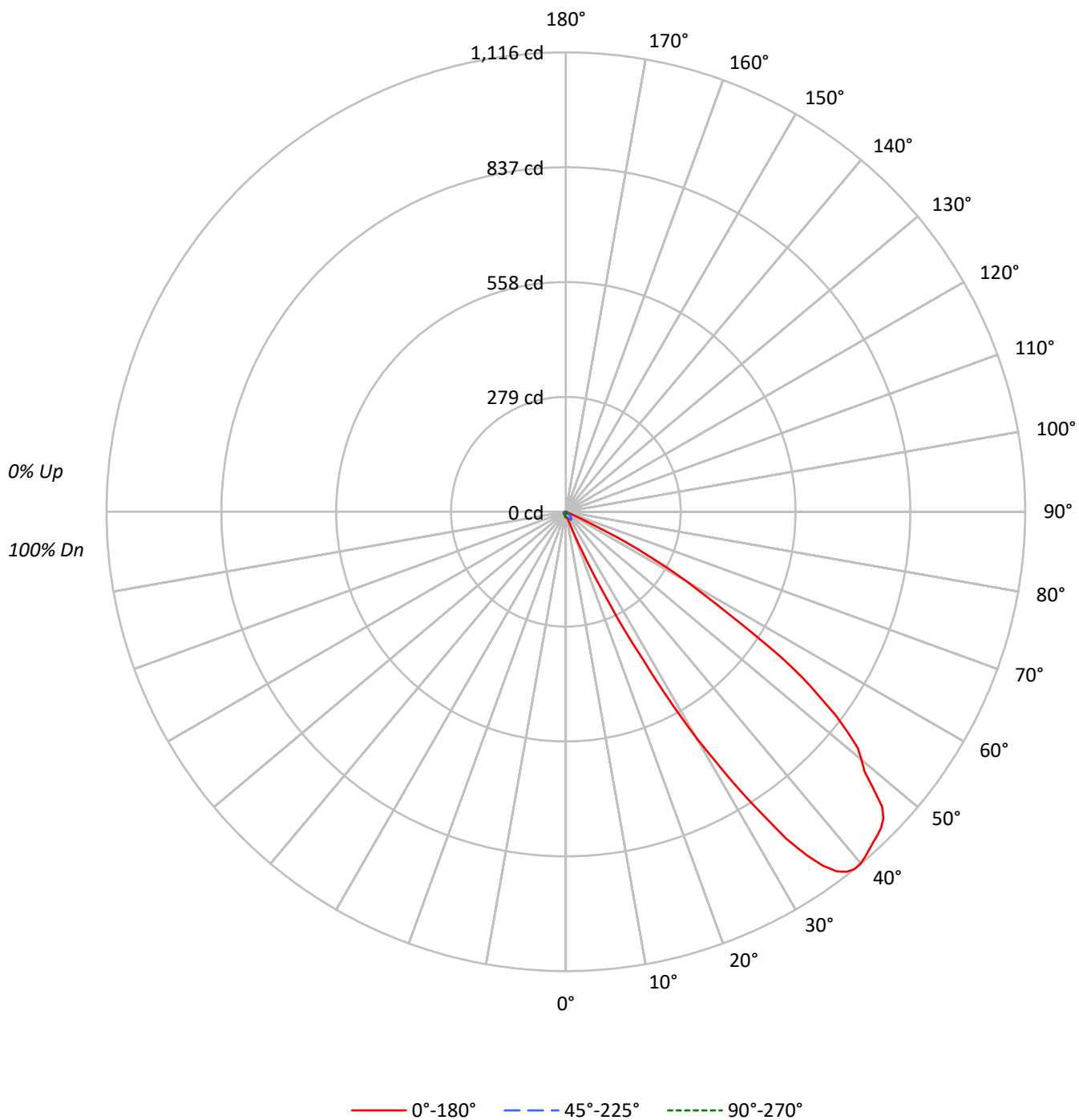
Lumens per Lamp: N/A
Luminaire Lumens: 278.1 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	24		
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20		
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2807	2807	2807	2807	2807
5°	3038	2994	2751	2487	2421
10°	3184	2895	2449	2115	2115
15°	4563	2838	1998	1816	1884
20°	11411	3034	1587	1587	1750
25°	53011	3895	1210	1452	1645
30°	161139	5267	962	1342	1646
35°	272350	6103	803	1285	1606
40°	319227	6040	658	1288	1718
45°	336190	4280	558	1395	1861
50°	320024	2559	512	1467	2047
55°	268148	1070	573	1644	2409
60°	150120	219	658	1886	2631
65°	25891	156	675	2075	3009
70°	513	192	833	2244	3398
75°	424	254	1101	2542	3813
80°	379	379	1263	2904	4420
85°	0	755	2516	3271	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 338584 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.4
10°-20°	3.3	1.2
20°-30°	17.1	6.1
30°-40°	73.7	26.5
40°-50°	105.1	37.8
50°-60°	65.1	23.4
60°-70°	9.9	3.6
70°-80°	1.9	0.7
80°-90°	1.0	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°	21.5	7.7
0°-40°	95.2	34.2
0°-60°	265.3	95.4
0°-90°	278.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	278.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	14	14	12	11	11	1
15°	20	12	9	8	8	7
25°	219	16	5	6	7	131
35°	1017	23	3	5	6	611
45°	1084	14	2	4	6	819
55°	701	3	2	4	6	597
65°	50	0	1	4	6	102
75°	0	0	1	3	4	1
85°	0	0	1	1	2	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
2.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	12.8	12.5
5°	13.8	13.8	13.6	13.6	13.6	13.6	13.6	13.6	13.0	12.5	11.8
7.5°	14.1	14.1	13.8	13.8	13.8	13.8	13.6	13.3	12.8	11.8	11.0
10°	14.3	14.3	14.3	14.3	14.1	13.8	13.6	13.0	12.3	11.0	10.3
12.5°	16.1	16.1	15.8	15.3	14.8	14.3	13.8	12.8	11.3	10.0	9.3
15°	20.1	19.8	19.3	18.6	17.6	16.3	15.3	12.5	10.3	8.8	8.3
17.5°	28.1	27.6	26.9	24.3	22.1	19.8	17.8	12.5	9.3	7.8	7.3
20°	48.9	49.2	43.9	37.9	32.9	27.4	22.3	13.0	8.3	6.8	6.5
22.5°	102.1	98.1	85.6	71.0	54.2	41.9	31.6	14.3	7.3	5.8	5.8
25°	219.1	203.8	173.4	131.0	92.4	65.5	45.9	16.1	6.5	5.0	5.3
27.5°	400.0	386.2	325.2	244.9	162.6	98.9	62.2	18.3	5.8	4.3	4.8
30°	636.4	598.3	518.7	401.5	271.8	151.3	83.6	20.8	4.8	3.8	4.5
31°	710.2	692.6	595.8	464.5	318.5	179.7	92.6	21.6	4.5	3.8	4.3
32°	797.8	766.7	679.8	533.5	365.9	205.0	103.4	22.3	4.3	3.3	4.3
33°	876.1	846.0	740.3	594.3	413.8	233.9	114.9	22.6	3.8	3.3	4.0
34°	958.4	917.2	812.6	657.8	463.0	265.0	125.5	22.8	3.5	3.0	4.0
35°	1017.4	976.2	874.8	707.9	505.4	292.6	137.5	22.8	3.3	3.0	3.8
36°	1063.0	1026.9	928.5	759.6	547.6	317.5	147.1	22.8	2.8	2.8	3.8
37°	1094.4	1060.0	964.7	804.1	579.7	339.5	155.6	22.8	2.5	2.8	3.8
38°	1109.7	1081.1	999.6	836.4	610.8	356.9	162.4	22.3	2.3	2.5	3.5
39°	1116.2	1092.9	1020.9	863.8	634.2	371.9	167.4	21.8	2.0	2.5	3.5
40°	1115.2	1094.9	1032.9	882.6	653.0	382.2	170.1	21.1	1.8	2.3	3.5
41°	1109.5	1091.9	1039.2	898.7	664.3	389.2	170.9	20.3	1.5	2.3	3.3
42°	1102.9	1086.9	1041.2	907.2	671.6	391.5	168.9	19.3	1.5	2.0	3.3
43°	1096.2	1081.4	1041.2	910.0	673.3	390.0	165.6	17.6	1.3	2.0	3.3
44°	1090.6	1076.6	1037.9	909.2	669.5	384.2	159.6	15.6	1.0	2.0	3.3
45°	1084.1	1070.3	1033.7	904.4	662.3	374.4	152.1	13.8	0.8	1.8	3.3
46°	1072.6	1061.8	1026.2	894.7	650.7	360.9	142.5	12.5	0.5	1.8	3.0
47°	1050.2	1041.0	1011.6	880.1	635.4	344.8	132.8	11.3	0.5	1.8	3.0
48°	1005.3	1005.1	982.5	853.0	611.1	324.7	122.5	10.0	0.5	1.8	3.0
49°	961.9	957.4	929.3	805.3	576.2	300.6	111.7	9.0	0.3	1.8	3.0
50°	938.1	928.3	882.1	749.1	531.5	267.3	100.1	7.5	0.3	1.5	3.0
51°	913.2	899.2	844.7	698.4	478.3	235.1	87.6	6.0	0.3	1.5	2.8
52°	868.3	855.0	794.0	650.0	426.6	202.3	75.5	5.0	0.3	1.5	3.0
53°	819.9	800.8	734.5	596.8	381.2	173.2	63.2	4.3	0.3	1.5	2.8
54°	758.9	750.4	674.3	531.5	328.0	145.1	51.9	3.5	0.3	1.5	2.8
55°	701.4	688.9	609.8	464.8	279.8	119.0	43.4	2.8	0.3	1.5	2.8
56°	628.1	609.3	535.3	403.5	230.9	95.9	36.6	2.3	0.3	1.5	2.8
57°	540.8	520.7	462.3	335.5	181.2	73.0	30.6	1.8	0.3	1.5	2.8
58°	457.5	440.2	377.4	259.0	136.5	50.7	25.3	1.3	0.3	1.3	2.8
59°	395.3	376.2	313.9	199.3	94.9	37.4	19.1	1.0	0.3	1.5	2.8
60°	342.3	317.7	252.7	154.3	67.8	26.9	14.1	0.5	0.5	1.5	2.8
62.5°	197.3	174.2	120.7	62.7	27.9	13.8	6.8	0.3	0.5	1.5	2.8
65°	49.9	44.4	28.9	13.6	7.8	4.8	2.5	0.3	0.5	1.3	2.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.8	1.8	1.8	1.5	1.3	1.0	0.5	0.3	0.5	1.3	2.5
70°	0.8	0.8	0.8	0.5	0.5	0.3	0.3	0.3	0.5	1.3	2.3
72.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.3	2.0
75°	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	1.3	2.0
77.5°	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0	1.8
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0	1.5
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.0	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.8	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.0	0.8
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):

	135°	157.5°	180°
0°	12.8	12.8	12.8
2.5°	12.0	12.0	12.0
5°	11.3	11.3	11.0
7.5°	10.5	10.3	10.3
10°	9.5	9.5	9.5
12.5°	8.8	8.8	8.8
15°	8.0	8.3	8.3
17.5°	7.3	7.8	7.8
20°	6.8	7.3	7.5
22.5°	6.3	6.8	7.0
25°	6.0	6.5	6.8
27.5°	5.5	6.3	6.8
30°	5.3	6.0	6.5
31°	5.3	6.0	6.3
32°	5.0	6.0	6.3
33°	5.0	6.0	6.3
34°	5.0	5.8	6.3
35°	4.8	5.8	6.0
36°	4.8	5.8	6.0
37°	4.8	5.8	6.3
38°	4.8	5.8	6.0
39°	4.5	5.8	6.0
40°	4.5	5.8	6.0
41°	4.5	5.8	6.0
42°	4.5	5.8	6.0
43°	4.5	5.8	6.0
44°	4.5	5.5	6.0
45°	4.5	5.5	6.0
46°	4.5	5.8	6.0
47°	4.5	5.8	6.3
48°	4.5	5.5	6.0
49°	4.3	5.5	6.0
50°	4.3	5.5	6.0
51°	4.3	5.8	6.3
52°	4.3	5.8	6.3
53°	4.3	5.8	6.3
54°	4.3	5.8	6.0
55°	4.3	5.8	6.3
56°	4.3	5.8	6.0
57°	4.3	5.8	6.0
58°	4.3	5.5	6.0
59°	4.3	5.5	6.0
60°	4.3	5.5	6.0
62.5°	4.0	5.5	6.0
65°	4.0	5.3	5.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	3.8	5.3	5.5
70°	3.5	5.0	5.3
72.5°	3.3	4.8	5.0
75°	3.0	4.3	4.5
77.5°	2.5	3.8	4.3
80°	2.3	3.3	3.5
82.5°	1.8	2.8	3.0
85°	1.3	2.0	2.0
87.5°	0.5	1.0	1.0
90°	0.0	0.0	0.0

(END OF REPORT)