

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: P1338937

Luminaire Tested: P3A05R409730DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R409730DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 97CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

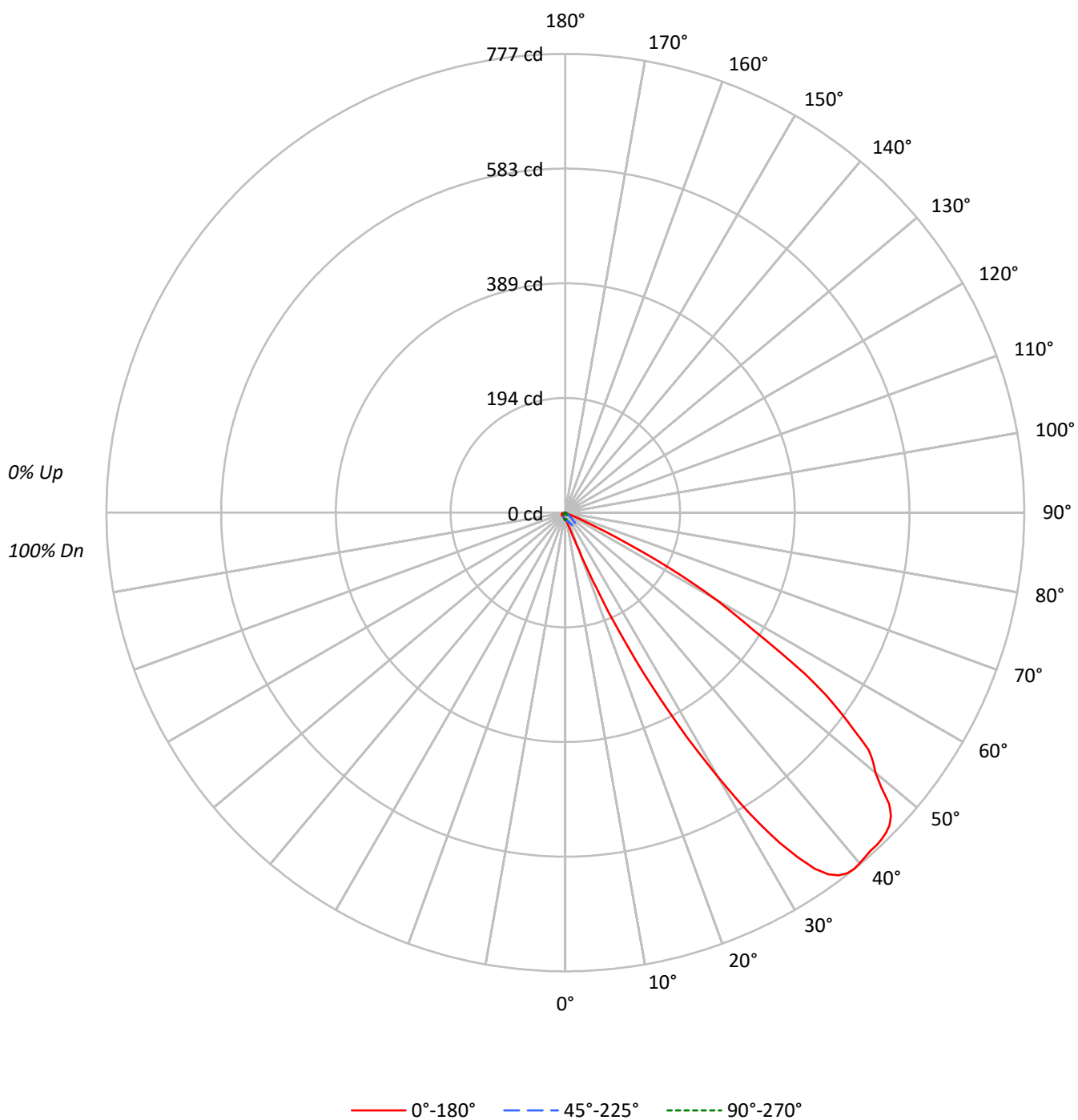
Lumens per Lamp: N/A
Luminaire Lumens: 240.0 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.55
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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
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	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	88	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	75	75	72
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	62	62	60
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	26	26	24
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	23	23	21
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	19	19	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2697	2697	2697	2697	2697
5°	3016	2906	2663	2421	2377
10°	3629	3095	2449	2204	2160
15°	5948	3360	2111	1952	1998
20°	15728	3967	1750	1750	1913
25°	60681	4912	1379	1597	1863
30°	130932	6533	1114	1570	1848
35°	197075	7736	937	1526	1901
40°	222016	7757	830	1574	2032
45°	238071	6016	744	1644	2202
50°	233988	3753	682	1740	2422
55°	205871	1835	688	1950	2714
60°	130297	395	789	2105	2982
65°	26670	104	778	2283	3321
70°	577	128	833	2565	3847
75°	593	339	932	2796	4321
80°	505	253	1137	3031	5051
85°	503	503	2264	3271	5535

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 242367 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.5
10°-20°	3.8	1.6
20°-30°	18.6	7.8
30°-40°	60.6	25.3
40°-50°	83.6	34.8
50°-60°	58.2	24.3
60°-70°	11.0	4.6
70°-80°	2.0	0.8
80°-90°	0.9	0.4
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°	23.6	9.8
0°-40°	84.2	35.1
0°-60°	226.0	94.2
0°-90°	240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	240.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12	12	12	12	12	
5°	14	13	12	11	11	1
15°	26	15	9	9	9	10
25°	251	20	6	7	8	129
35°	736	29	4	6	7	445
45°	768	19	2	5	7	584
55°	538	5	2	5	7	460
65°	51	0	2	4	6	91
75°	1	0	1	3	5	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°	35°	45°	67.5°	90°
0°	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
2.5°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.6	12.3
5°	13.7	13.7	13.7	13.7	13.4	13.4	13.4	13.2	13.2	12.8	12.1
7.5°	14.5	14.5	14.5	14.5	14.3	14.1	13.9	13.9	13.7	12.6	11.7
10°	16.3	16.3	16.1	15.9	15.6	15.2	15.0	14.5	13.9	12.3	11.0
12.5°	19.8	19.4	19.2	18.7	18.1	17.2	16.3	15.6	14.1	11.9	10.4
15°	26.2	25.8	24.9	23.6	22.3	20.5	19.0	17.4	14.8	11.2	9.3
17.5°	37.5	36.1	34.8	32.6	29.3	26.2	22.9	20.1	15.6	10.6	8.4
20°	67.4	66.6	58.6	52.5	42.5	35.5	28.9	24.0	17.0	9.9	7.5
22.5°	139.1	129.8	116.8	95.7	74.5	54.9	39.9	30.2	18.3	9.0	6.6
25°	250.8	236.3	208.3	167.5	123.6	87.5	57.7	39.5	20.3	8.2	5.7
27.5°	379.8	365.0	321.6	265.4	193.7	132.0	82.4	52.2	22.9	7.3	5.1
30°	517.1	504.5	449.4	371.6	273.1	184.9	110.4	65.2	25.8	6.4	4.4
31°	572.4	556.3	496.8	413.9	310.3	206.7	121.7	70.8	26.9	6.2	4.2
32°	623.3	605.0	543.3	454.5	340.5	230.3	134.0	75.6	27.8	5.7	4.0
33°	667.2	645.8	586.3	492.8	373.8	252.4	146.8	80.2	28.4	5.3	3.7
34°	704.4	685.9	622.0	531.4	403.3	273.5	159.4	84.9	28.9	5.1	3.5
35°	736.2	719.4	656.2	560.7	432.2	294.0	170.8	89.3	28.9	4.6	3.5
36°	757.5	743.0	685.7	590.7	456.5	311.4	180.5	93.2	28.9	4.2	3.3
37°	769.2	755.1	705.1	615.4	480.3	328.6	189.3	96.3	28.7	4.0	3.1
38°	775.2	762.8	719.4	635.4	496.8	341.0	197.0	98.7	28.4	3.5	3.1
39°	776.7	766.4	728.4	650.0	512.9	353.3	202.6	100.1	27.8	3.3	2.9
40°	775.6	766.6	733.3	663.0	525.2	363.0	206.5	100.5	27.1	2.9	2.9
41°	773.4	766.4	736.8	672.0	535.1	369.2	208.1	99.6	26.2	2.4	2.6
42°	771.4	763.7	738.4	678.2	542.0	372.3	207.8	97.9	24.9	2.2	2.6
43°	771.4	762.6	738.6	682.2	545.3	372.5	205.2	94.6	23.1	2.0	2.4
44°	770.1	761.9	739.7	684.8	546.2	370.5	201.0	91.0	21.2	1.8	2.4
45°	767.7	759.1	739.5	685.0	544.6	365.7	194.2	86.4	19.4	1.3	2.4
46°	763.0	755.3	737.5	683.5	540.0	358.6	186.0	81.8	17.4	1.1	2.2
47°	753.8	747.8	732.2	678.2	532.9	348.2	176.3	76.5	15.9	0.9	2.2
48°	737.9	733.7	723.2	666.5	519.5	335.5	166.0	70.8	14.3	0.9	2.2
49°	708.8	705.5	699.4	647.8	502.3	319.8	154.7	64.4	12.8	0.7	2.2
50°	685.9	682.4	669.8	616.3	477.6	300.0	142.4	58.0	11.0	0.4	2.0
51°	670.7	665.0	645.1	579.7	441.7	273.5	128.9	51.6	9.3	0.4	2.0
52°	651.5	642.9	618.2	546.8	408.9	247.1	114.4	45.2	8.2	0.4	2.0
53°	611.4	608.3	583.9	511.6	376.0	221.7	99.4	39.9	7.1	0.4	2.0
54°	576.4	571.7	538.5	462.6	340.3	193.5	84.0	35.3	6.0	0.4	2.0
55°	538.5	529.4	499.9	421.4	298.4	167.5	69.2	30.4	4.8	0.4	1.8
56°	490.6	482.7	451.0	377.3	259.9	141.1	58.0	24.9	3.7	0.4	1.8
57°	432.4	425.2	400.7	323.1	219.7	115.3	47.2	20.1	2.9	0.4	1.8
58°	376.2	368.1	340.1	271.1	177.4	91.5	39.5	16.3	2.2	0.4	1.8
59°	333.0	322.0	285.9	227.7	138.9	69.4	31.3	13.0	1.5	0.4	1.8
60°	297.1	288.1	250.6	189.5	108.9	51.1	23.1	9.9	0.9	0.4	1.8
62.5°	172.1	169.7	136.0	97.6	51.4	23.8	11.5	4.6	0.4	0.7	1.8
65°	51.4	44.7	34.8	20.7	13.2	7.9	4.2	1.5	0.2	0.7	1.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.9	0.4	0.2	0.7	1.5
70°	0.9	0.7	0.7	0.7	0.7	0.4	0.4	0.2	0.2	0.7	1.3
72.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.2	0.4	0.7	1.1
75°	0.7	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.7	1.1
77.5°	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.4	0.7	1.1
80°	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.7	0.7
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):

	112.5°	135°	157.5°	180°
0°	12.3	12.3	12.3	12.3
2.5°	11.9	11.7	11.5	11.5
5°	11.5	11.0	11.0	10.8
7.5°	10.8	10.4	10.4	10.4
10°	10.1	9.9	9.9	9.7
12.5°	9.3	9.3	9.3	9.3
15°	8.6	8.6	8.8	8.8
17.5°	7.7	7.9	8.4	8.6
20°	7.1	7.5	7.9	8.2
22.5°	6.6	7.1	7.7	7.9
25°	6.0	6.6	7.5	7.7
27.5°	5.5	6.4	7.1	7.5
30°	5.1	6.2	6.8	7.3
31°	5.1	6.0	6.8	7.3
32°	4.8	5.7	6.8	7.1
33°	4.8	5.7	6.8	7.1
34°	4.6	5.7	6.6	7.1
35°	4.6	5.7	6.6	7.1
36°	4.4	5.5	6.6	7.1
37°	4.4	5.5	6.6	7.1
38°	4.2	5.5	6.6	7.1
39°	4.2	5.5	6.6	7.1
40°	4.2	5.5	6.6	7.1
41°	4.0	5.5	6.6	7.1
42°	4.0	5.5	6.6	7.1
43°	4.0	5.3	6.6	7.1
44°	4.0	5.3	6.6	7.1
45°	3.7	5.3	6.6	7.1
46°	3.7	5.3	6.6	7.1
47°	3.7	5.3	6.6	7.1
48°	3.7	5.3	6.6	7.1
49°	3.7	5.3	6.6	7.1
50°	3.5	5.1	6.6	7.1
51°	3.5	5.1	6.6	7.1
52°	3.5	5.1	6.6	7.1
53°	3.5	5.1	6.6	7.1
54°	3.3	5.1	6.6	7.1
55°	3.3	5.1	6.6	7.1
56°	3.3	5.1	6.6	6.8
57°	3.3	5.1	6.4	6.8
58°	3.3	4.8	6.4	6.8
59°	3.3	4.8	6.4	6.8
60°	3.3	4.8	6.4	6.8
62.5°	3.1	4.8	6.2	6.6
65°	2.9	4.4	6.2	6.4



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	2.9	4.2	5.7	6.2
70°	2.6	4.0	5.5	6.0
72.5°	2.2	3.7	5.1	5.5
75°	2.0	3.3	4.6	5.1
77.5°	1.8	2.9	4.2	4.4
80°	1.5	2.4	3.5	4.0
82.5°	1.1	1.8	2.9	3.1
85°	0.9	1.3	2.0	2.2
87.5°	0.7	0.7	1.1	1.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)