

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: P1338974

Luminaire Tested: P3A05R409740DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338974
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: P3A05R409740DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 97CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

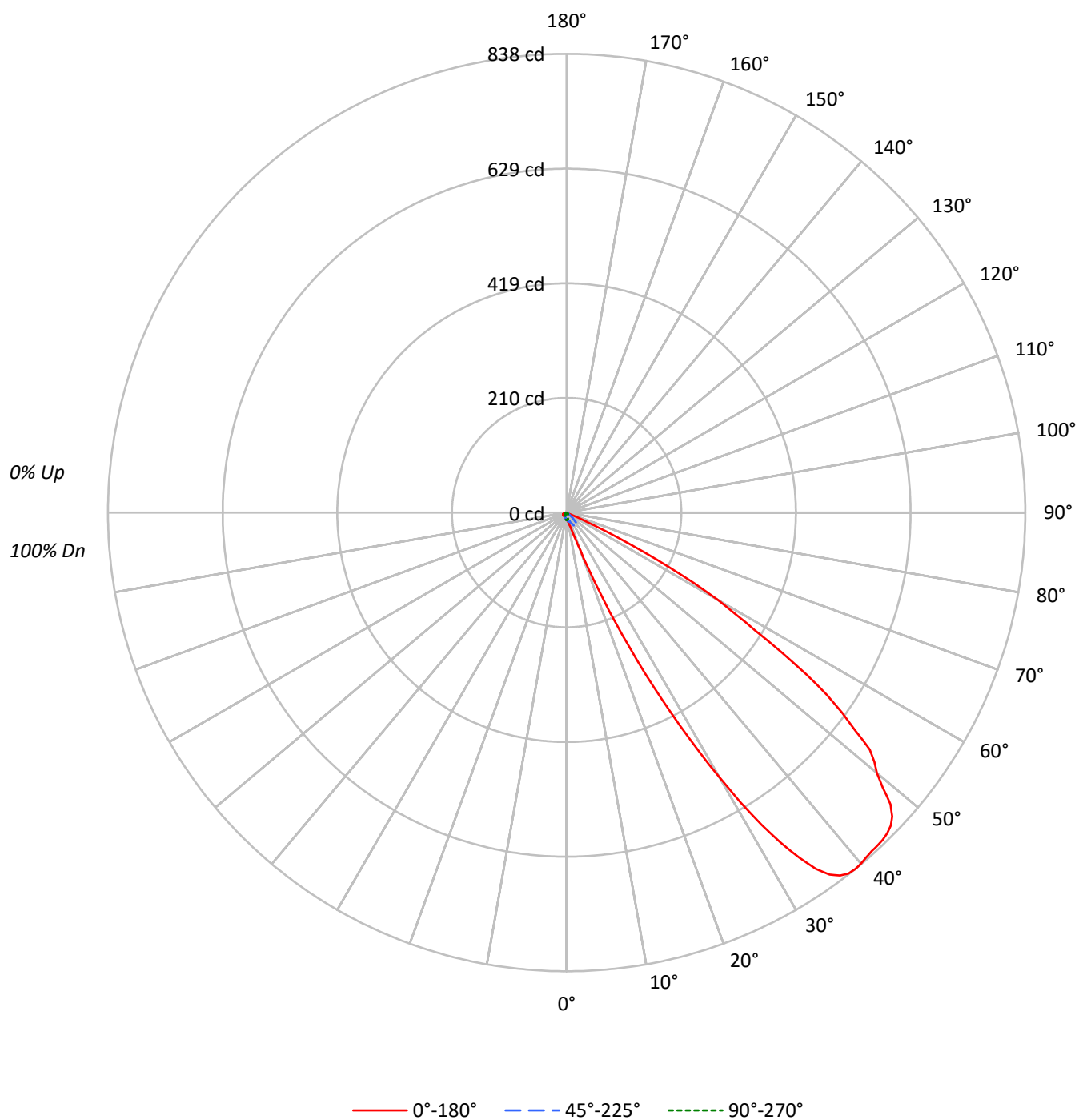
Lumens per Lamp: N/A
Luminaire Lumens: 259.0 lumens
Efficiency: N/A
Efficacy: 36.0 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	2916	2916	2916	2916	2916
5°	3236	3148	2884	2619	2575
10°	3919	3340	2650	2382	2338
15°	6425	3610	2270	2111	2157
20°	16988	4270	1890	1890	2054
25°	65496	5299	1500	1718	2008
30°	141288	7039	1215	1696	1975
35°	212655	8352	1017	1660	2034
40°	239592	8387	887	1689	2176
45°	256926	6481	806	1768	2357
50°	252512	4060	716	1876	2593
55°	222157	1988	726	2103	2906
60°	140603	439	833	2281	3245
65°	28745	104	882	2491	3580
70°	641	128	898	2757	4103
75°	593	424	1017	3050	4660
80°	631	253	1263	3283	5430
85°	503	503	2516	3522	6038

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 261562 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.5
10°-20°	4.1	1.6
20°-30°	20.1	7.8
30°-40°	65.4	25.3
40°-50°	90.2	34.8
50°-60°	62.8	24.3
60°-70°	11.9	4.6
70°-80°	2.2	0.8
80°-90°	1.0	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°	25.5	9.8
0°-40°	90.9	35.1
0°-60°	243.9	94.2
0°-90°	259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	259.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	15	14	13	12	12	1
15°	28	16	10	9	10	10
25°	271	22	6	7	8	139
35°	794	31	4	6	8	480
45°	828	21	3	6	8	630
55°	581	5	2	6	8	497
65°	55	0	2	5	7	98
75°	1	0	1	4	6	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°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
2.5°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.6	13.3
5°	14.7	14.7	14.7	14.7	14.5	14.5	14.5	14.3	14.3	13.8	13.1
7.5°	15.7	15.7	15.7	15.7	15.5	15.2	15.0	15.0	14.7	13.6	12.6
10°	17.6	17.6	17.4	17.1	16.9	16.4	16.2	15.7	15.0	13.3	11.9
12.5°	21.4	20.9	20.7	20.2	19.5	18.6	17.6	16.9	15.2	12.8	11.2
15°	28.3	27.8	26.9	25.5	24.0	22.1	20.5	18.8	15.9	12.1	10.0
17.5°	40.4	39.0	37.6	35.2	31.6	28.3	24.7	21.6	16.9	11.4	9.0
20°	72.8	71.8	63.3	56.6	45.9	38.3	31.2	25.9	18.3	10.7	8.1
22.5°	150.1	140.1	126.1	103.2	80.4	59.2	43.1	32.6	19.7	9.8	7.1
25°	270.7	255.0	224.8	180.8	133.4	94.4	62.3	42.6	21.9	8.8	6.2
27.5°	409.8	393.9	347.0	286.4	209.1	142.5	89.0	56.4	24.7	7.8	5.5
30°	558.0	544.5	485.0	401.0	294.7	199.6	119.2	70.4	27.8	6.9	4.8
31°	617.7	600.3	536.1	446.7	334.9	223.1	131.3	76.4	29.0	6.7	4.5
32°	672.7	652.9	586.3	490.5	367.5	248.6	144.6	81.6	30.0	6.2	4.3
33°	720.0	696.9	632.7	531.8	403.4	272.3	158.4	86.6	30.7	5.7	4.0
34°	760.2	740.2	671.2	573.5	435.3	295.2	172.0	91.6	31.2	5.5	3.8
35°	794.4	776.4	708.1	605.1	466.4	317.3	184.3	96.3	31.2	5.0	3.8
36°	817.5	801.8	740.0	637.5	492.6	336.1	194.8	100.6	31.2	4.5	3.6
37°	830.1	814.9	760.9	664.1	518.3	354.6	204.3	103.9	30.9	4.3	3.3
38°	836.5	823.2	776.4	685.7	536.1	368.0	212.6	106.6	30.7	3.8	3.3
39°	838.2	827.0	786.1	701.4	553.5	381.3	218.6	108.0	30.0	3.6	3.1
40°	837.0	827.3	791.3	715.5	566.8	391.7	222.9	108.5	29.3	3.1	3.1
41°	834.6	827.0	795.2	725.2	577.5	398.4	224.5	107.5	28.3	2.6	2.9
42°	832.5	824.2	796.8	731.9	584.9	401.7	224.3	105.6	26.9	2.4	2.9
43°	832.5	823.0	797.1	736.2	588.5	402.0	221.4	102.0	25.0	2.1	2.6
44°	831.1	822.3	798.2	739.0	589.4	399.8	216.9	98.2	22.8	1.9	2.6
45°	828.5	819.2	798.0	739.3	587.7	394.6	209.6	93.2	20.9	1.4	2.6
46°	823.5	815.1	795.9	737.6	582.7	387.0	200.8	88.2	18.8	1.2	2.4
47°	813.5	807.0	790.2	731.9	575.1	375.8	190.3	82.5	17.1	1.0	2.4
48°	796.3	791.8	780.4	719.3	560.6	362.0	179.1	76.4	15.5	1.0	2.4
49°	764.9	761.4	754.7	699.1	542.1	345.1	167.0	69.5	13.8	0.7	2.4
50°	740.2	736.4	722.8	665.0	515.4	323.7	153.7	62.6	11.9	0.5	2.1
51°	723.8	717.6	696.2	625.6	476.7	295.2	139.1	55.7	10.0	0.5	2.1
52°	703.1	693.8	667.2	590.1	441.2	266.6	123.4	48.8	8.8	0.5	2.1
53°	659.8	656.5	630.1	552.1	405.8	239.3	107.3	43.1	7.6	0.5	2.1
54°	622.0	617.0	581.1	499.3	367.2	208.8	90.6	38.1	6.4	0.5	2.1
55°	581.1	571.3	539.5	454.8	322.1	180.8	74.7	32.8	5.2	0.5	1.9
56°	529.5	520.9	486.7	407.2	280.4	152.2	62.6	26.9	4.0	0.5	1.9
57°	466.7	458.8	432.4	348.7	237.1	124.4	50.9	21.6	3.1	0.5	1.9
58°	406.0	397.2	367.0	292.6	191.5	98.7	42.6	17.6	2.4	0.5	1.9
59°	359.4	347.5	308.5	245.7	149.8	74.9	33.8	14.0	1.7	0.5	1.9
60°	320.6	310.9	270.4	204.6	117.5	55.2	25.0	10.7	1.0	0.5	1.9
62.5°	185.8	183.1	146.8	105.4	55.4	25.7	12.4	5.0	0.5	0.7	1.9
65°	55.4	48.3	37.6	22.4	14.3	8.6	4.5	1.7	0.2	0.7	1.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.0	0.5	0.2	0.7	1.7
70°	1.0	0.7	0.7	0.7	0.7	0.5	0.5	0.2	0.2	0.7	1.4
72.5°	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.2	0.5	0.7	1.2
75°	0.7	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.7	1.2
77.5°	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.5	0.7	1.2
80°	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.0
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.0
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	1.0
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°	13.3	13.3	13.3	13.3
2.5°	12.8	12.6	12.4	12.4
5°	12.4	11.9	11.9	11.7
7.5°	11.7	11.2	11.2	11.2
10°	10.9	10.7	10.7	10.5
12.5°	10.0	10.0	10.0	10.0
15°	9.3	9.3	9.5	9.5
17.5°	8.3	8.6	9.0	9.3
20°	7.6	8.1	8.6	8.8
22.5°	7.1	7.6	8.3	8.6
25°	6.4	7.1	8.1	8.3
27.5°	5.9	6.9	7.6	8.1
30°	5.5	6.7	7.4	7.8
31°	5.5	6.4	7.4	7.8
32°	5.2	6.2	7.4	7.6
33°	5.2	6.2	7.4	7.6
34°	5.0	6.2	7.1	7.6
35°	5.0	6.2	7.1	7.6
36°	4.8	5.9	7.1	7.6
37°	4.8	5.9	7.1	7.6
38°	4.5	5.9	7.1	7.6
39°	4.5	5.9	7.1	7.6
40°	4.5	5.9	7.1	7.6
41°	4.3	5.9	7.1	7.6
42°	4.3	5.9	7.1	7.6
43°	4.3	5.7	7.1	7.6
44°	4.3	5.7	7.1	7.6
45°	4.0	5.7	7.1	7.6
46°	4.0	5.7	7.1	7.6
47°	4.0	5.7	7.1	7.6
48°	4.0	5.7	7.1	7.6
49°	4.0	5.7	7.1	7.6
50°	3.8	5.5	7.1	7.6
51°	3.8	5.5	7.1	7.6
52°	3.8	5.5	7.1	7.6
53°	3.8	5.5	7.1	7.6
54°	3.6	5.5	7.1	7.6
55°	3.6	5.5	7.1	7.6
56°	3.6	5.5	7.1	7.4
57°	3.6	5.5	6.9	7.4
58°	3.6	5.2	6.9	7.4
59°	3.6	5.2	6.9	7.4
60°	3.6	5.2	6.9	7.4
62.5°	3.3	5.2	6.7	7.1
65°	3.1	4.8	6.7	6.9



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	3.1	4.5	6.2	6.7
70°	2.9	4.3	5.9	6.4
72.5°	2.4	4.0	5.5	5.9
75°	2.1	3.6	5.0	5.5
77.5°	1.9	3.1	4.5	4.8
80°	1.7	2.6	3.8	4.3
82.5°	1.2	1.9	3.1	3.3
85°	1.0	1.4	2.1	2.4
87.5°	0.7	0.7	1.2	1.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)