

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: P1344980

Luminaire Tested: P3A13R309050DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344980
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R309050DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 5000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

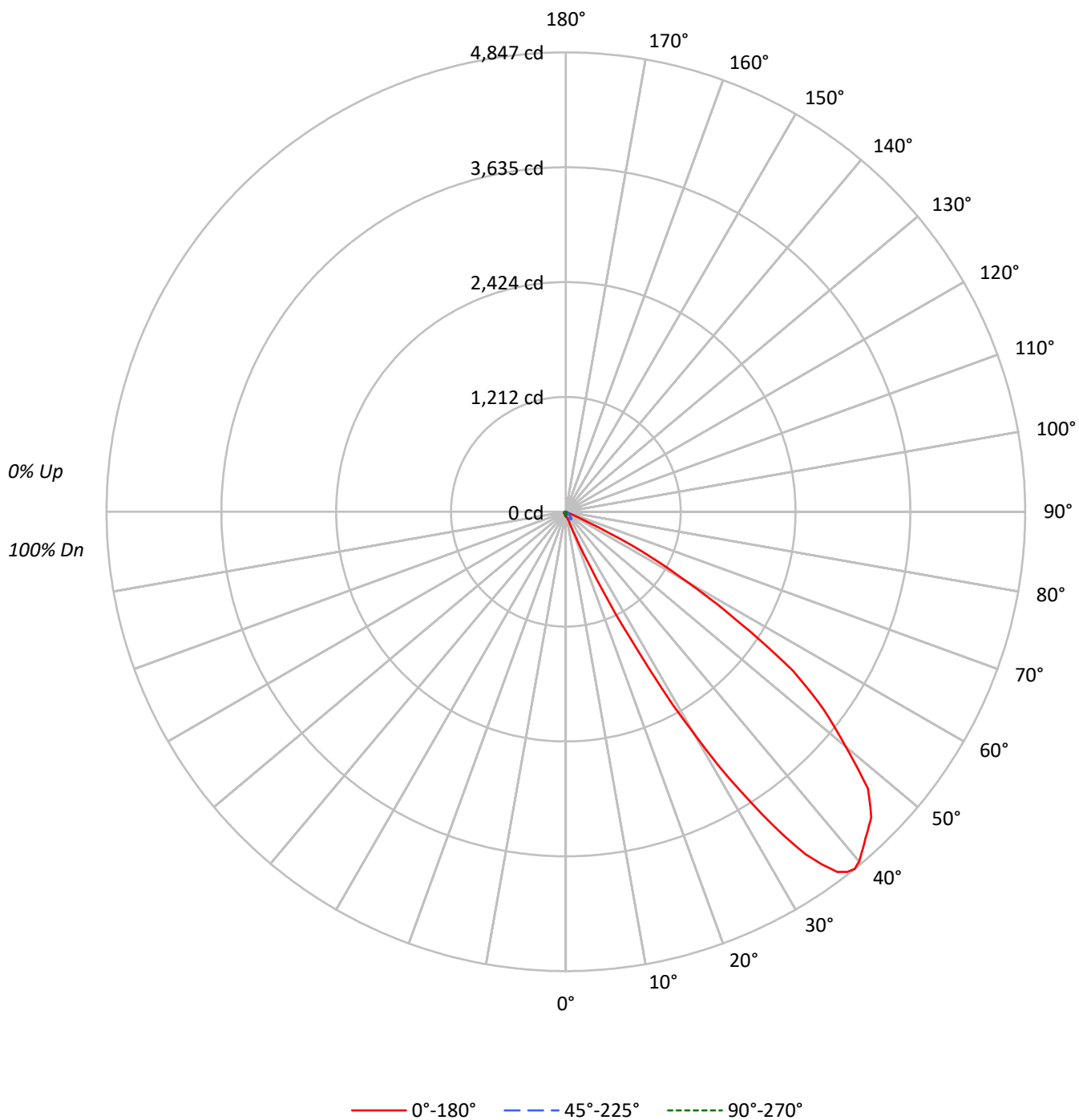
Lumens per Lamp: N/A
Luminaire Lumens: 1260.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	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	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35		
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	24		
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10701	10701	10701	10701	10701
5°	11446	11204	10522	9575	9355
10°	12536	11111	9218	8261	8038
15°	18320	11078	7719	6992	7219
20°	46064	12134	5951	5951	6697
25°	213908	15146	4621	5395	6170
30°	680991	20965	3494	5115	6178
35°	1181647	25565	2838	4818	6264
40°	1378125	25534	2118	4866	6383
45°	1413325	18110	2295	5272	6915
50°	1314345	10132	1808	5424	7983
55°	1117093	5276	2026	6079	8946
60°	645168	1403	2324	6535	9780
65°	131635	0	2750	7731	11000
70°	2052	705	3398	8848	12951
75°	1779	932	3558	8981	15250
80°	1389	1389	5304	10734	17426
85°	0	2768	10567	10567	21386

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1413325 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.4	0.4
10°-20°	12.7	1.0
20°-30°	72.7	5.8
30°-40°	339.4	26.9
40°-50°	479.9	38.1
50°-60°	295.3	23.4
60°-70°	45.0	3.6
70°-80°	7.1	0.6
80°-90°	3.6	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°	89.8	7.1
0°-40°	429.2	34.1
0°-60°	1204.4	95.6
0°-90°	1260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1260.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	49	49	49	49	49	
5°	52	51	48	44	42	5
15°	81	49	34	31	32	29
25°	884	63	19	22	26	544
35°	4414	96	11	18	23	2649
45°	4558	58	7	17	22	3455
55°	2922	14	5	16	23	2486
65°	254	0	5	15	21	459
75°	2	1	4	11	18	2
85°	0	1	4	4	8	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
2.5°	49.9	49.9	50.9	50.9	49.9	50.9	50.9	50.9	48.8	47.8	45.6
5°	52.0	52.0	52.0	53.1	52.0	52.0	50.9	49.9	47.8	44.6	43.5
7.5°	54.1	54.1	53.1	54.1	53.1	53.1	50.9	48.8	45.6	42.5	40.3
10°	56.3	56.3	55.2	55.2	54.1	54.1	49.9	46.7	41.4	38.2	37.1
12.5°	62.6	62.6	61.6	60.5	58.4	57.3	48.8	43.5	37.1	34.0	32.9
15°	80.7	79.6	77.5	74.3	69.0	67.9	48.8	40.3	34.0	30.8	30.8
17.5°	110.4	109.3	106.1	97.6	88.1	84.9	48.8	36.1	29.7	27.6	27.6
20°	197.4	188.9	173.0	151.8	129.5	117.8	52.0	31.8	25.5	24.4	25.5
21°	257.9	249.4	229.3	194.2	155.0	142.2	54.1	30.8	24.4	23.4	25.5
22°	351.3	341.8	300.4	252.6	196.4	174.1	55.2	28.7	22.3	22.3	24.4
23°	490.4	474.4	404.4	328.0	245.2	213.3	57.3	27.6	21.2	22.3	23.4
24°	642.1	628.3	548.7	434.1	313.1	267.5	59.4	26.5	20.2	20.2	22.3
25°	884.1	868.2	727.0	547.7	397.0	321.6	62.6	24.4	19.1	19.1	22.3
26°	1197.2	1124.0	936.1	705.8	489.3	403.3	65.8	23.4	18.0	19.1	21.2
27°	1494.4	1433.9	1222.7	905.3	605.0	495.7	70.1	22.3	17.0	18.0	21.2
28°	1885.0	1800.1	1533.7	1145.2	762.1	599.7	74.3	21.2	15.9	18.0	20.2
29°	2322.3	2203.4	1881.8	1414.8	939.3	716.4	78.5	20.2	14.9	17.0	20.2
30°	2689.5	2578.1	2256.5	1734.3	1143.1	870.3	82.8	19.1	13.8	17.0	20.2
31°	3120.4	2951.7	2562.1	2004.9	1318.2	1024.2	87.0	17.0	12.7	15.9	19.1
32°	3469.6	3351.8	2937.9	2310.6	1548.5	1194.0	90.2	15.9	12.7	15.9	19.1
33°	3807.1	3649.0	3248.9	2603.5	1756.6	1368.1	93.4	14.9	11.7	14.9	19.1
34°	4129.8	3984.4	3542.9	2840.2	1952.9	1533.7	95.5	12.7	11.7	14.9	18.0
35°	4414.2	4245.5	3801.8	3071.6	2154.6	1684.4	95.5	11.7	10.6	13.8	18.0
36°	4598.9	4477.9	4026.8	3299.8	2337.1	1827.7	95.5	10.6	9.6	13.8	17.0
37°	4757.1	4615.9	4207.3	3474.9	2471.9	1942.3	95.5	9.6	9.6	13.8	17.0
38°	4821.8	4700.8	4331.5	3629.9	2598.2	2059.1	94.5	8.5	8.5	12.7	17.0
39°	4847.3	4739.0	4424.9	3741.3	2691.6	2137.6	92.3	7.4	8.5	12.7	17.0
40°	4814.4	4732.7	4472.6	3813.5	2765.9	2194.9	89.2	6.4	7.4	12.7	17.0
42.5°	4678.5	4624.4	4462.0	3885.7	2829.6	2237.4	77.5	4.2	7.4	11.7	17.0
45°	4557.5	4498.1	4354.8	3810.3	2746.8	2153.5	58.4	2.1	7.4	11.7	17.0
47.5°	4323.0	4285.8	4173.3	3618.2	2565.3	1964.6	41.4	1.1	6.4	10.6	15.9
50°	3852.8	3817.8	3669.2	3141.7	2206.6	1661.0	29.7	1.1	5.3	10.6	15.9
52.5°	3431.4	3394.3	3180.9	2612.0	1695.0	1217.4	19.1	1.1	5.3	10.6	15.9
55°	2922.0	2857.2	2577.0	1982.6	1201.5	816.2	13.8	1.1	5.3	9.6	15.9
57.5°	2163.1	2068.6	1818.1	1352.2	692.0	442.6	7.4	1.1	5.3	9.6	15.9
60°	1471.1	1414.8	1137.8	713.2	295.1	186.8	3.2	1.1	5.3	9.6	14.9
62.5°	891.6	820.4	572.1	303.6	127.4	84.9	0.0	2.1	5.3	9.6	14.9
65°	253.7	225.0	149.7	69.0	36.1	27.6	0.0	2.1	5.3	9.6	14.9
67.5°	8.5	8.5	8.5	7.4	5.3	5.3	1.1	2.1	5.3	9.6	13.8
70°	3.2	3.2	3.2	2.1	2.1	1.1	1.1	2.1	5.3	8.5	13.8
72.5°	2.1	2.1	2.1	2.1	1.1	1.1	1.1	2.1	4.2	7.4	12.7
75°	2.1	2.1	2.1	1.1	1.1	1.1	1.1	3.2	4.2	7.4	10.6
77.5°	2.1	2.1	2.1	1.1	1.1	1.1	1.1	3.2	4.2	6.4	10.6
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	3.2	4.2	6.4	8.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	1.1	1.1	1.1	0.0	0.0	0.0	1.1	3.2	4.2	4.2	6.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.2	4.2	3.2	4.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.2	3.2	3.2	2.1
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):

	157.5°	180°
0°	48.8	48.8
2.5°	45.6	45.6
5°	42.5	42.5
7.5°	39.3	39.3
10°	36.1	36.1
12.5°	34.0	34.0
15°	30.8	31.8
17.5°	28.7	29.7
20°	27.6	28.7
21°	27.6	28.7
22°	26.5	27.6
23°	26.5	27.6
24°	25.5	26.5
25°	24.4	25.5
26°	24.4	25.5
27°	24.4	25.5
28°	23.4	25.5
29°	23.4	24.4
30°	23.4	24.4
31°	22.3	24.4
32°	22.3	24.4
33°	22.3	23.4
34°	21.2	23.4
35°	21.2	23.4
36°	21.2	23.4
37°	21.2	22.3
38°	21.2	23.4
39°	21.2	22.3
40°	21.2	22.3
42.5°	21.2	22.3
45°	21.2	22.3
47.5°	21.2	23.4
50°	21.2	23.4
52.5°	21.2	23.4
55°	21.2	23.4
57.5°	21.2	22.3
60°	21.2	22.3
62.5°	20.2	22.3
65°	20.2	21.2
67.5°	20.2	21.2
70°	19.1	20.2
72.5°	18.0	19.1
75°	15.9	18.0
77.5°	14.9	15.9
80°	12.7	13.8

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	10.6	10.6
85°	7.4	8.5
87.5°	4.2	4.2
90°	0.0	0.0

(END OF REPORT)