

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: P1336389

Luminaire Tested: P3A05R159727DE010 E3A451GPH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336389
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R159727DE010 E3A451GPH
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 97CRI , E3A451GPH TRIM
Light Source: -
Ballast/Driver: -

Summary

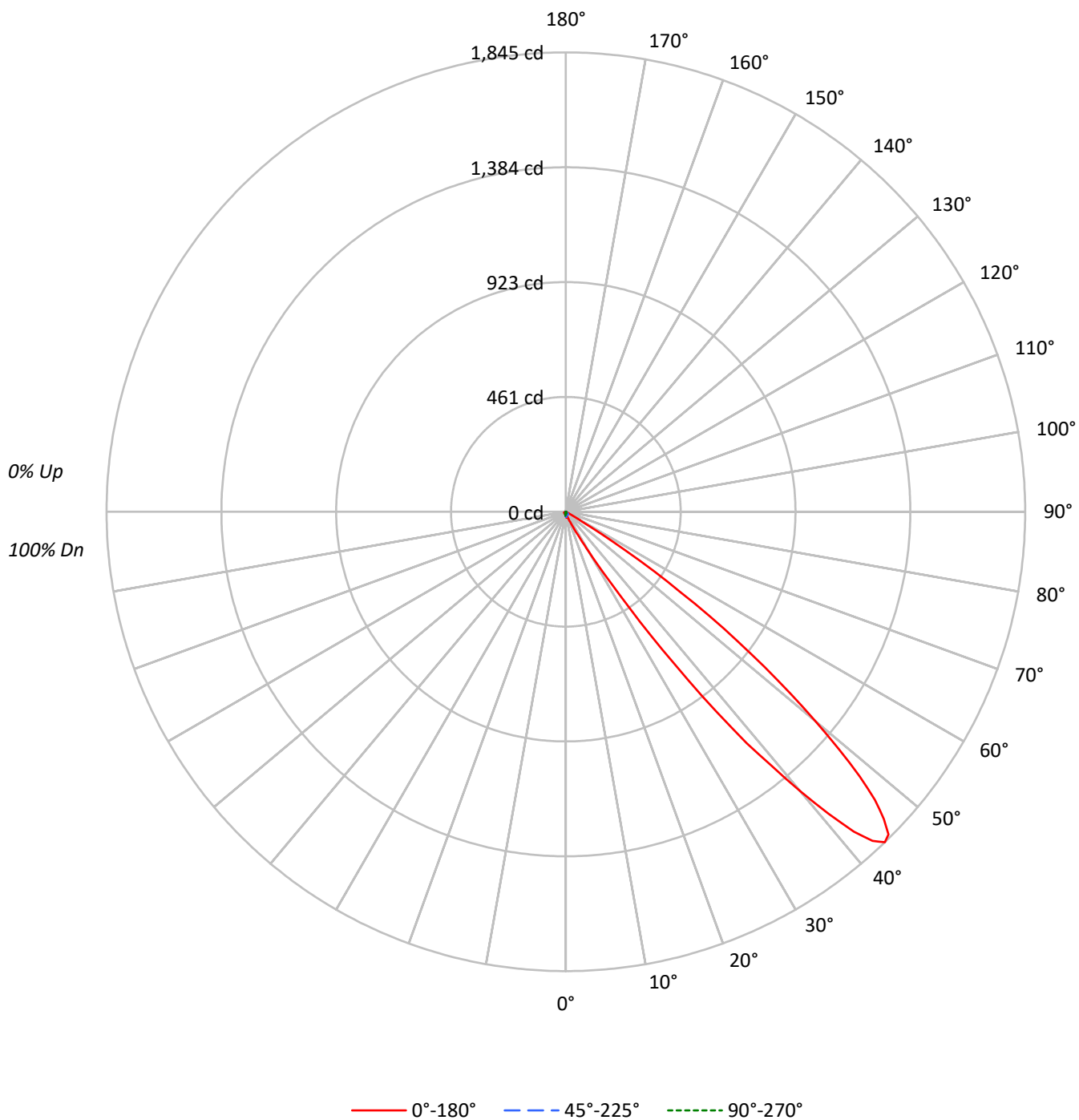
Lumens per Lamp: N/A
Luminaire Lumens: 206.0 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	100		
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	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	53	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	37	49	42	37	48	42	37	35		
7	62	47	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	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	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	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4013	4013	4013	4013	4013
5°	4975	4424	3610	3170	3126
10°	4899	3785	2783	2472	2516
15°	4064	2701	1998	2043	2202
20°	7047	2147	1540	1773	2007
25°	15703	2589	1234	1645	1887
30°	46969	3165	1089	1621	1975
35°	180799	3587	990	1660	2088
40°	419615	3120	945	1718	2233
45°	568369	2357	837	1861	2419
50°	445666	1399	853	1979	2661
55°	213899	612	803	2103	2906
60°	19560	88	702	2237	3245
65°	2127	0	623	2335	3528
70°	513	0	769	2500	3847
75°	508	169	1017	2796	4321
80°	505	505	1263	2904	4672
85°	503	503	2013	2516	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 568369 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.8
10°-20°	3.2	1.6
20°-30°	7.8	3.8
30°-40°	42.6	20.7
40°-50°	103.2	50.1
50°-60°	41.2	20.0
60°-70°	3.6	1.7
70°-80°	2.0	1.0
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°	12.6	6.1
0°-40°	55.2	26.8
0°-60°	199.6	96.9
0°-90°	206.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	206.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	23	20	16	14	14	2
15°	18	12	9	9	10	6
25°	65	11	5	7	8	39
35°	675	13	4	6	8	477
45°	1833	8	3	6	8	1293
55°	560	2	2	6	8	521
65°	4	0	1	4	7	11
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°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
2.5°	20.5	20.5	20.7	20.5	20.5	20.5	20.5	20.3	20.3	20.3	19.7
5°	22.6	22.6	22.6	22.6	22.4	22.4	22.4	22.2	22.2	22.0	20.1
7.5°	23.4	23.4	23.2	23.2	23.0	23.0	22.8	22.6	22.4	22.2	19.3
10°	22.0	22.0	22.0	21.8	21.8	21.6	21.4	21.2	21.0	20.5	17.0
12.5°	19.5	19.5	19.7	19.5	19.3	19.1	18.7	18.5	18.3	17.9	14.2
15°	17.9	17.9	17.9	17.7	17.5	17.0	16.8	16.4	16.2	15.6	11.9
17.5°	22.8	22.8	22.6	22.2	21.4	20.7	19.7	18.9	17.9	16.6	10.3
20°	30.2	30.2	29.8	29.4	28.3	27.3	25.7	24.2	22.6	21.2	9.2
22.5°	43.8	44.4	43.1	41.7	40.3	37.8	35.5	33.3	30.4	27.9	9.4
25°	64.9	65.5	64.9	61.6	59.0	55.7	51.4	46.8	41.9	37.4	10.7
27.5°	105.2	105.6	104.5	96.5	92.2	83.6	76.0	68.6	60.4	52.2	11.7
30°	185.5	185.7	179.1	163.1	148.9	130.0	114.0	98.6	85.7	72.5	12.5
31°	244.2	238.5	224.5	205.2	182.6	157.1	135.2	115.2	95.9	81.7	12.7
32°	310.2	309.3	286.1	252.6	222.4	190.6	157.5	132.1	109.9	90.6	12.9
33°	397.5	397.9	361.3	321.9	272.4	229.6	186.3	151.4	124.7	101.1	13.4
34°	533.8	501.8	458.9	405.5	338.1	273.8	217.5	173.8	138.0	111.1	13.4
35°	675.4	643.1	595.9	514.9	422.5	332.5	254.7	197.8	154.1	122.0	13.4
36°	833.9	806.6	735.1	631.8	513.9	388.0	294.1	225.5	169.9	131.9	13.1
37°	1005.2	965.2	885.9	773.1	615.4	466.1	342.2	253.1	185.7	142.5	12.7
38°	1179.2	1143.1	1043.0	906.4	736.6	548.4	390.3	279.6	200.3	150.6	12.1
39°	1311.1	1291.4	1192.1	1039.5	833.3	626.5	439.8	307.9	215.7	158.6	11.5
40°	1465.9	1434.1	1340.0	1151.3	947.7	706.0	488.2	333.0	228.4	164.9	10.9
41°	1607.3	1567.0	1448.3	1265.9	1039.3	777.4	534.2	358.8	238.7	168.6	10.5
42°	1728.5	1681.6	1557.6	1364.1	1115.9	834.5	571.0	377.3	248.3	171.7	9.9
43°	1806.9	1766.5	1644.4	1437.8	1181.5	886.9	605.3	396.6	254.3	173.8	9.0
44°	1845.1	1804.2	1686.1	1484.0	1221.7	918.3	627.5	410.0	260.9	176.4	8.4
45°	1832.8	1791.3	1677.1	1484.8	1234.3	929.6	636.9	415.9	264.4	178.9	7.6
46°	1776.3	1747.1	1632.1	1446.2	1210.4	917.5	631.6	411.4	263.1	178.9	6.8
47°	1697.0	1663.8	1554.3	1379.9	1152.7	886.3	610.0	397.7	255.5	174.8	6.0
48°	1589.0	1560.6	1445.6	1274.5	1064.2	818.3	561.4	375.3	243.6	166.8	5.1
49°	1453.4	1414.0	1307.0	1139.8	948.7	721.8	497.5	337.5	224.5	155.5	4.5
50°	1306.4	1257.7	1175.1	1004.8	829.4	618.9	413.5	285.3	197.6	140.7	4.1
51°	1162.4	1112.9	1034.2	889.4	702.1	513.5	333.6	227.8	162.7	120.4	3.5
52°	1013.0	971.5	883.4	769.6	601.0	416.1	277.9	192.7	135.2	101.1	2.9
53°	864.3	836.0	752.2	636.9	482.9	339.9	227.0	164.9	117.9	86.5	2.3
54°	715.4	684.4	620.7	518.0	389.2	268.3	192.5	138.0	102.3	75.4	2.1
55°	559.5	543.5	484.7	395.0	295.0	214.0	156.1	118.7	85.7	63.1	1.6
56°	430.9	412.9	359.2	286.5	219.2	167.6	126.3	96.9	72.5	52.8	1.2
57°	282.2	263.7	228.2	200.1	159.6	122.2	96.5	76.4	59.0	43.8	1.0
58°	166.8	149.9	144.4	123.2	106.4	83.0	71.3	56.9	43.5	34.5	0.6
59°	76.6	77.8	69.2	64.9	59.0	52.8	43.3	38.0	29.8	24.9	0.4
60°	44.6	42.1	41.1	36.8	32.7	29.0	26.1	23.0	18.7	16.0	0.2
62.5°	15.2	14.6	15.0	13.6	12.7	12.3	11.3	9.7	8.0	6.6	0.0
65°	4.1	4.1	3.9	3.7	3.5	3.3	3.1	2.7	2.5	2.1	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°	1.4	1.4	1.2	1.2	1.0	1.0	0.8	0.8	0.6	0.6	0.0
70°	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.0
72.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.2	0.2
75°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.4
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	0.2	0.2	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°	18.3	18.3	18.3	18.3	18.3	18.3
2.5°	18.9	18.1	17.0	16.4	16.2	16.0
5°	18.1	16.4	15.2	14.4	14.2	14.2
7.5°	16.2	14.4	13.1	12.7	12.5	12.5
10°	14.2	12.5	11.5	11.1	11.3	11.3
12.5°	11.9	10.5	10.1	10.1	10.3	10.5
15°	9.7	8.8	8.8	9.0	9.4	9.7
17.5°	8.0	7.6	7.8	8.2	8.6	9.0
20°	6.6	6.6	7.0	7.6	8.2	8.6
22.5°	5.5	5.8	6.4	7.0	7.8	8.2
25°	4.7	5.1	5.8	6.8	7.6	7.8
27.5°	4.1	4.7	5.5	6.6	7.4	7.8
30°	3.5	4.3	5.3	6.4	7.4	7.8
31°	3.3	4.1	5.1	6.4	7.4	7.8
32°	3.1	4.1	5.1	6.4	7.4	7.8
33°	2.9	3.9	5.1	6.2	7.4	7.8
34°	2.7	3.9	5.1	6.4	7.4	7.8
35°	2.5	3.7	4.9	6.2	7.2	7.8
36°	2.3	3.7	4.9	6.2	7.4	7.8
37°	2.1	3.7	4.9	6.2	7.2	7.8
38°	2.1	3.5	4.7	6.2	7.2	7.8
39°	1.8	3.3	4.7	6.2	7.2	7.8
40°	1.6	3.3	4.5	6.0	7.2	7.8
41°	1.4	3.1	4.5	6.0	7.2	7.8
42°	1.2	3.1	4.5	6.0	7.2	7.8
43°	1.0	2.9	4.3	6.0	7.2	7.8
44°	1.0	2.9	4.3	6.0	7.2	7.8
45°	0.8	2.7	4.1	6.0	7.2	7.8
46°	0.8	2.7	4.1	5.8	7.2	7.8
47°	0.6	2.7	4.1	5.8	7.2	7.8
48°	0.6	2.5	4.1	5.8	7.2	7.8
49°	0.4	2.5	4.1	5.8	7.2	7.8
50°	0.4	2.5	3.9	5.8	7.2	7.8
51°	0.4	2.5	3.9	5.8	7.2	7.8
52°	0.4	2.3	3.9	5.8	7.2	7.8
53°	0.4	2.3	3.9	5.8	7.2	7.8
54°	0.4	2.3	3.7	5.8	7.2	7.8
55°	0.4	2.1	3.7	5.5	7.2	7.6
56°	0.4	2.1	3.7	5.5	7.2	7.6
57°	0.4	2.1	3.5	5.5	7.2	7.6
58°	0.4	1.8	3.5	5.3	7.0	7.6
59°	0.4	1.8	3.3	5.3	7.0	7.4
60°	0.4	1.6	3.3	5.1	6.8	7.4
62.5°	0.4	1.4	2.9	4.9	6.6	7.0
65°	0.4	1.2	2.7	4.5	6.4	6.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.2	2.5	4.3	6.0	6.6
70°	0.4	1.2	2.3	3.9	5.8	6.0
72.5°	0.6	1.2	2.1	3.7	5.3	5.5
75°	0.8	1.2	1.8	3.3	4.9	5.1
77.5°	0.8	1.2	1.6	2.9	4.3	4.5
80°	0.8	1.0	1.4	2.3	3.5	3.7
82.5°	0.8	1.0	1.0	1.8	2.7	2.9
85°	0.6	0.8	0.8	1.0	1.8	2.1
87.5°	0.6	0.8	0.4	0.6	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)