

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: P1338016

Luminaire Tested: P3A05R309840DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1338016
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: P3A05R309840DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 98CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

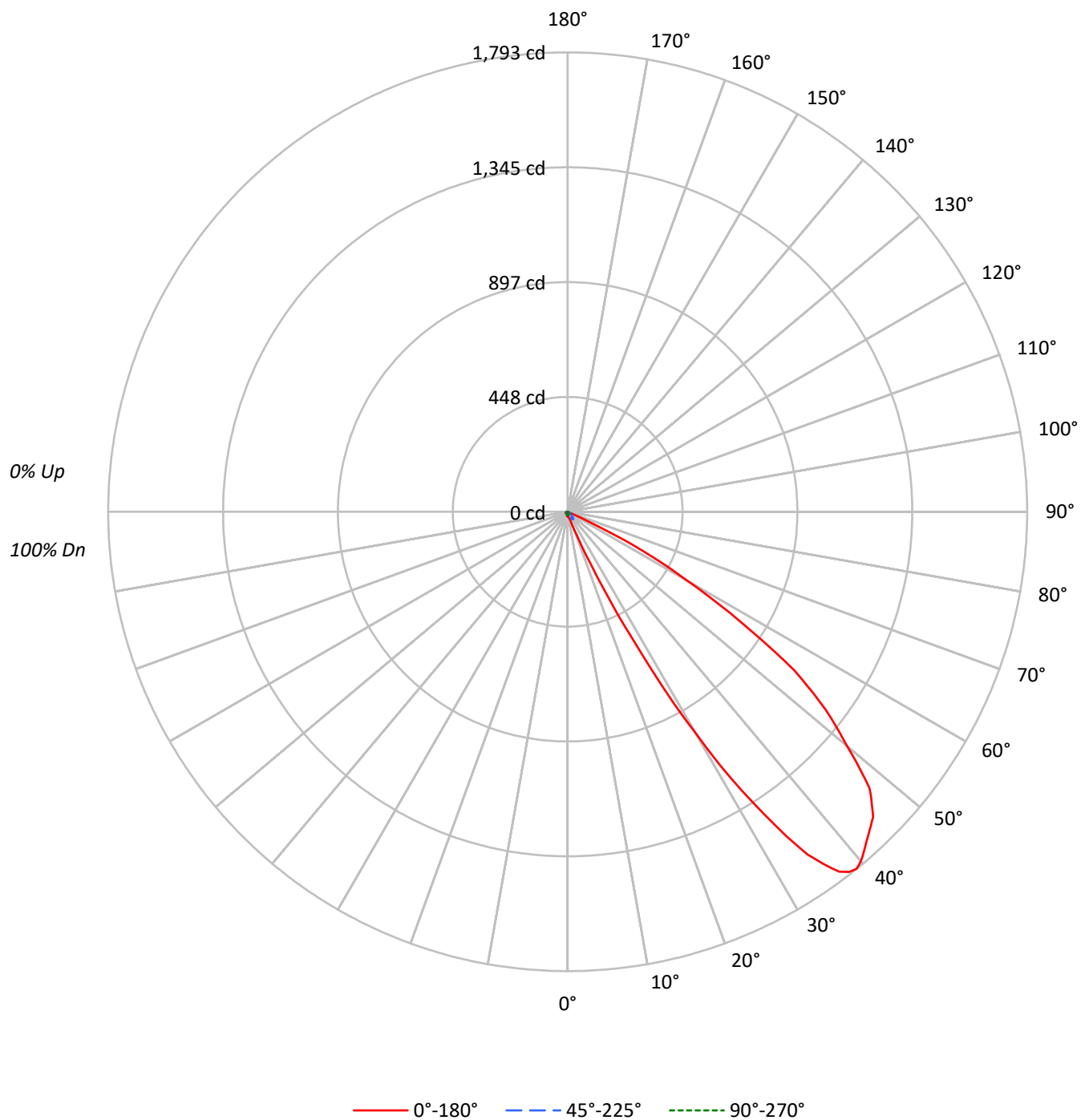
Lumens per Lamp: N/A
Luminaire Lumens: 466.0 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3969	3969	3969	3969	3969
5°	4226	4138	3896	3544	3456
10°	4631	4097	3407	3050	2961
15°	6765	4109	2860	2588	2679
20°	17035	4480	2194	2194	2474
25°	79117	5613	1718	1984	2274
30°	251862	7748	1291	1899	2279
35°	437034	9450	1044	1794	2302
40°	509698	9446	773	1803	2347
45°	522721	6698	837	1954	2543
50°	486091	3753	682	2013	2934
55°	413156	1950	765	2256	3288
60°	238621	526	877	2412	3596
65°	48669	0	1038	2854	4099
70°	769	256	1282	3270	4809
75°	678	339	1356	3304	5676
80°	505	505	2020	3915	6440
85°	0	1006	4026	4026	7799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 522721 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.3
10°-20°	4.7	1.0
20°-30°	26.9	5.8
30°-40°	125.5	26.9
40°-50°	177.5	38.1
50°-60°	109.2	23.4
60°-70°	16.6	3.6
70°-80°	2.6	0.6
80°-90°	1.3	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°	33.2	7.1
0°-40°	158.7	34.1
0°-60°	445.4	95.6
0°-90°	466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	466.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	19	19	18	16	16	2
15°	30	18	13	11	12	11
25°	327	23	7	8	9	201
35°	1633	35	4	7	9	980
45°	1686	22	3	6	8	1278
55°	1081	5	2	6	9	920
65°	94	0	2	6	8	170
75°	1	0	2	4	7	1
85°	0	0	2	2	3	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°	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
2.5°	18.4	18.4	18.8	18.8	18.4	18.8	18.8	18.8	18.1	17.7	16.9
5°	19.2	19.2	19.2	19.6	19.2	19.2	18.8	18.4	17.7	16.5	16.1
7.5°	20.0	20.0	19.6	20.0	19.6	19.6	18.8	18.1	16.9	15.7	14.9
10°	20.8	20.8	20.4	20.4	20.0	20.0	18.4	17.3	15.3	14.1	13.7
12.5°	23.2	23.2	22.8	22.4	21.6	21.2	18.1	16.1	13.7	12.6	12.2
15°	29.8	29.4	28.7	27.5	25.5	25.1	18.1	14.9	12.6	11.4	11.4
17.5°	40.8	40.4	39.3	36.1	32.6	31.4	18.1	13.3	11.0	10.2	10.2
20°	73.0	69.9	64.0	56.1	47.9	43.6	19.2	11.8	9.4	9.0	9.4
21°	95.4	92.2	84.8	71.8	57.3	52.6	20.0	11.4	9.0	8.6	9.4
22°	129.9	126.4	111.1	93.4	72.6	64.4	20.4	10.6	8.2	8.2	9.0
23°	181.4	175.5	149.6	121.3	90.7	78.9	21.2	10.2	7.9	8.2	8.6
24°	237.5	232.4	202.9	160.5	115.8	98.9	22.0	9.8	7.5	7.5	8.2
25°	327.0	321.1	268.9	202.5	146.8	118.9	23.2	9.0	7.1	7.1	8.2
26°	442.8	415.7	346.2	261.0	181.0	149.2	24.3	8.6	6.7	7.1	7.9
27°	552.7	530.3	452.2	334.8	223.7	183.3	25.9	8.2	6.3	6.7	7.9
28°	697.1	665.7	567.2	423.5	281.8	221.8	27.5	7.9	5.9	6.7	7.5
29°	858.9	814.9	696.0	523.3	347.4	265.0	29.0	7.5	5.5	6.3	7.5
30°	994.7	953.5	834.5	641.4	422.8	321.9	30.6	7.1	5.1	6.3	7.5
31°	1154.1	1091.7	947.6	741.5	487.5	378.8	32.2	6.3	4.7	5.9	7.1
32°	1283.2	1239.6	1086.5	854.6	572.7	441.6	33.4	5.9	4.7	5.9	7.1
33°	1408.0	1349.5	1201.6	962.9	649.7	506.0	34.5	5.5	4.3	5.5	7.1
34°	1527.4	1473.6	1310.3	1050.4	722.3	567.2	35.3	4.7	4.3	5.5	6.7
35°	1632.6	1570.2	1406.1	1136.0	796.9	623.0	35.3	4.3	3.9	5.1	6.7
36°	1700.9	1656.1	1489.3	1220.4	864.4	676.0	35.3	3.9	3.5	5.1	6.3
37°	1759.4	1707.2	1556.0	1285.2	914.2	718.3	35.3	3.5	3.5	5.1	6.3
38°	1783.3	1738.6	1602.0	1342.5	960.9	761.5	34.9	3.1	3.1	4.7	6.3
39°	1792.7	1752.7	1636.5	1383.7	995.5	790.6	34.2	2.7	3.1	4.7	6.3
40°	1780.6	1750.3	1654.2	1410.4	1023.0	811.8	33.0	2.4	2.7	4.7	6.3
42.5°	1730.3	1710.3	1650.2	1437.1	1046.5	827.5	28.7	1.6	2.7	4.3	6.3
45°	1685.6	1663.6	1610.6	1409.2	1015.9	796.5	21.6	0.8	2.7	4.3	6.3
47.5°	1598.8	1585.1	1543.5	1338.2	948.8	726.6	15.3	0.4	2.4	3.9	5.9
50°	1424.9	1412.0	1357.0	1161.9	816.1	614.3	11.0	0.4	2.0	3.9	5.9
52.5°	1269.1	1255.3	1176.4	966.0	626.9	450.2	7.1	0.4	2.0	3.9	5.9
55°	1080.7	1056.7	953.1	733.3	444.4	301.9	5.1	0.4	2.0	3.5	5.9
57.5°	800.0	765.1	672.4	500.1	255.9	163.7	2.7	0.4	2.0	3.5	5.9
60°	544.1	523.3	420.8	263.8	109.1	69.1	1.2	0.4	2.0	3.5	5.5
62.5°	329.7	303.4	211.6	112.3	47.1	31.4	0.0	0.8	2.0	3.5	5.5
65°	93.8	83.2	55.3	25.5	13.3	10.2	0.0	0.8	2.0	3.5	5.5
67.5°	3.1	3.1	3.1	2.7	2.0	2.0	0.4	0.8	2.0	3.5	5.1
70°	1.2	1.2	1.2	0.8	0.8	0.4	0.4	0.8	2.0	3.1	5.1
72.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.8	1.6	2.7	4.7
75°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.2	1.6	2.7	3.9
77.5°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	1.2	1.6	2.4	3.9
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.6	2.4	3.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	1.2	1.6	1.6	2.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	1.6	1.2	1.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	1.2	1.2	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):

	157.5°	180°
0°	18.1	18.1
2.5°	16.9	16.9
5°	15.7	15.7
7.5°	14.5	14.5
10°	13.3	13.3
12.5°	12.6	12.6
15°	11.4	11.8
17.5°	10.6	11.0
20°	10.2	10.6
21°	10.2	10.6
22°	9.8	10.2
23°	9.8	10.2
24°	9.4	9.8
25°	9.0	9.4
26°	9.0	9.4
27°	9.0	9.4
28°	8.6	9.4
29°	8.6	9.0
30°	8.6	9.0
31°	8.2	9.0
32°	8.2	9.0
33°	8.2	8.6
34°	7.9	8.6
35°	7.9	8.6
36°	7.9	8.6
37°	7.9	8.2
38°	7.9	8.6
39°	7.9	8.2
40°	7.9	8.2
42.5°	7.9	8.2
45°	7.9	8.2
47.5°	7.9	8.6
50°	7.9	8.6
52.5°	7.9	8.6
55°	7.9	8.6
57.5°	7.9	8.2
60°	7.9	8.2
62.5°	7.5	8.2
65°	7.5	7.9
67.5°	7.5	7.9
70°	7.1	7.5
72.5°	6.7	7.1
75°	5.9	6.7
77.5°	5.5	5.9
80°	4.7	5.1



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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	3.9	3.9
85°	2.7	3.1
87.5°	1.6	1.6
90°	0.0	0.0

(END OF REPORT)