

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: P1337840

Luminaire Tested: P3A05R309030DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337840
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: P3A05R309030DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 3000K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

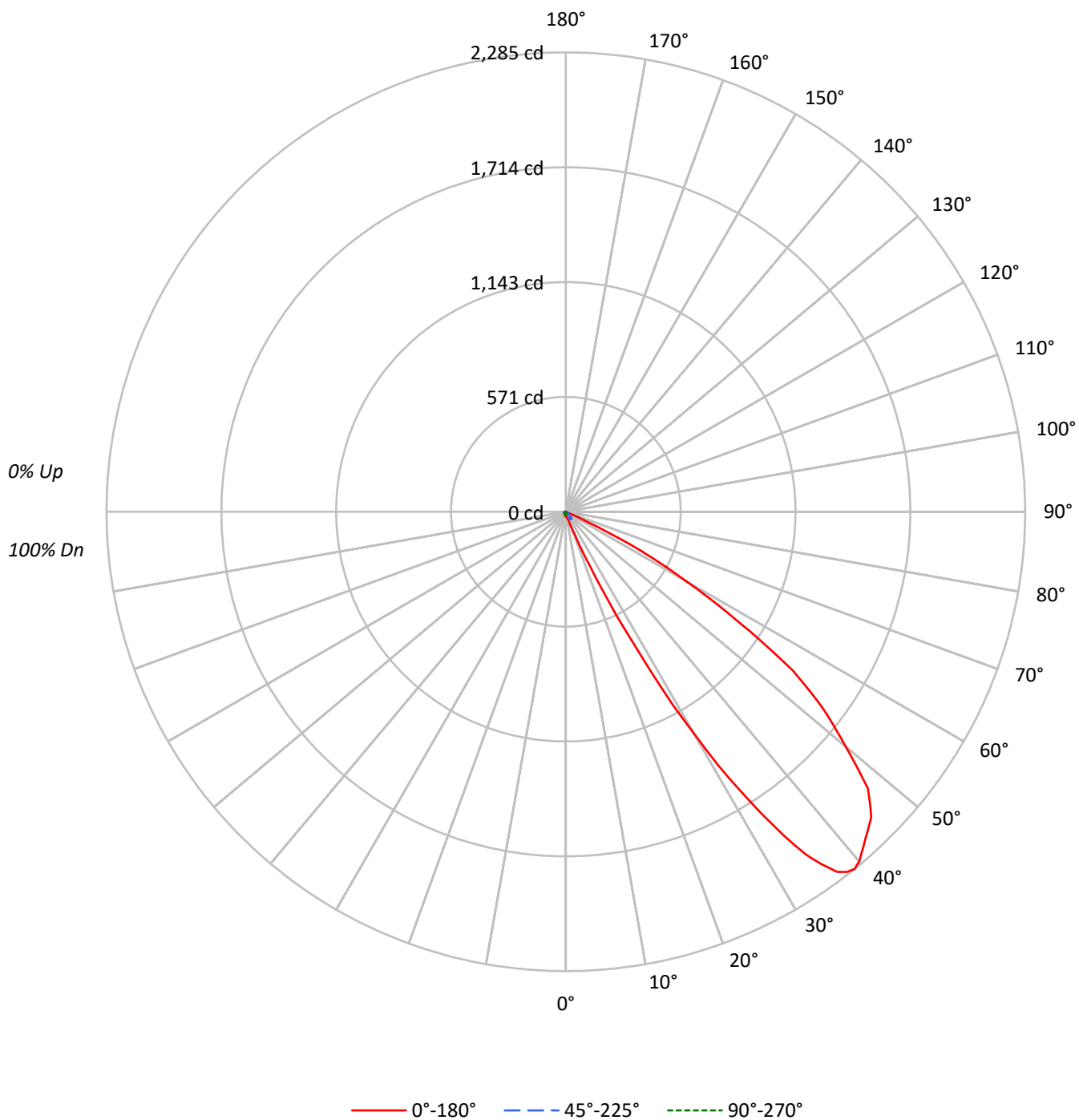
Lumens per Lamp: N/A
Luminaire Lumens: 594.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	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	37	49	42	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	31	31	29
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26	26	26	24
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22	22	22	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5043	5043	5043	5043	5043
5°	5393	5283	4953	4512	4402
10°	5901	5233	4342	3897	3785
15°	8627	5221	3632	3292	3405
20°	21725	5717	2800	2800	3150
25°	100845	7138	2178	2540	2903
30°	321037	9875	1646	2405	2912
35°	557068	12046	1338	2275	2945
40°	649674	12023	1002	2290	3006
45°	666271	8528	1085	2481	3256
50°	619613	4776	853	2559	3753
55°	526624	2485	956	2867	4205
60°	304142	658	1096	3070	4605
65°	62056	0	1297	3632	5189
70°	962	321	1603	4167	6091
75°	847	424	1694	4236	7202
80°	631	631	2526	5051	8208
85°	0	1258	5032	5032	10064

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 666271 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.1	0.3
10°-20°	6.0	1.0
20°-30°	34.3	5.8
30°-40°	160.0	26.9
40°-50°	226.2	38.1
50°-60°	139.2	23.4
60°-70°	21.2	3.6
70°-80°	3.4	0.6
80°-90°	1.7	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°	42.3	7.1
0°-40°	202.3	34.1
0°-60°	567.7	95.6
0°-90°	594.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	594.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	23	23	23	23	23	
5°	24	24	22	20	20	2
15°	38	23	16	14	15	14
25°	417	30	9	10	12	256
35°	2081	45	5	8	11	1249
45°	2148	28	4	8	10	1629
55°	1378	6	2	8	11	1172
65°	120	0	2	7	10	216
75°	1	0	2	5	8	1
85°	0	0	2	2	4	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°	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
2.5°	23.5	23.5	24.0	24.0	23.5	24.0	24.0	24.0	23.0	22.5	21.5
5°	24.5	24.5	24.5	25.0	24.5	24.5	24.0	23.5	22.5	21.0	20.5
7.5°	25.5	25.5	25.0	25.5	25.0	25.0	24.0	23.0	21.5	20.0	19.0
10°	26.5	26.5	26.0	26.0	25.5	25.5	23.5	22.0	19.5	18.0	17.5
12.5°	29.5	29.5	29.0	28.5	27.5	27.0	23.0	20.5	17.5	16.0	15.5
15°	38.0	37.5	36.5	35.0	32.5	32.0	23.0	19.0	16.0	14.5	14.5
17.5°	52.0	51.5	50.0	46.0	41.5	40.0	23.0	17.0	14.0	13.0	13.0
20°	93.1	89.1	81.6	71.6	61.0	55.5	24.5	15.0	12.0	11.5	12.0
21°	121.6	117.6	108.1	91.6	73.1	67.0	25.5	14.5	11.5	11.0	12.0
22°	165.6	161.1	141.6	119.1	92.6	82.1	26.0	13.5	10.5	10.5	11.5
23°	231.2	223.7	190.6	154.6	115.6	100.6	27.0	13.0	10.0	10.5	11.0
24°	302.7	296.2	258.7	204.6	147.6	126.1	28.0	12.5	9.5	9.5	10.5
25°	416.8	409.3	342.7	258.2	187.1	151.6	29.5	11.5	9.0	9.0	10.5
26°	564.4	529.9	441.3	332.7	230.7	190.1	31.0	11.0	8.5	9.0	10.0
27°	704.5	676.0	576.4	426.8	285.2	233.7	33.0	10.5	8.0	8.5	10.0
28°	888.6	848.6	723.0	539.9	359.3	282.7	35.0	10.0	7.5	8.5	9.5
29°	1094.8	1038.7	887.1	667.0	442.8	337.7	37.0	9.5	7.0	8.0	9.5
30°	1267.9	1215.4	1063.8	817.6	538.9	410.3	39.0	9.0	6.5	8.0	9.5
31°	1471.1	1391.5	1207.9	945.2	621.4	482.8	41.0	8.0	6.0	7.5	9.0
32°	1635.7	1580.1	1385.0	1089.3	730.0	562.9	42.5	7.5	6.0	7.5	9.0
33°	1794.8	1720.2	1531.6	1227.4	828.1	645.0	44.0	7.0	5.5	7.0	9.0
34°	1946.9	1878.4	1670.2	1339.0	920.7	723.0	45.0	6.0	5.5	7.0	8.5
35°	2081.0	2001.4	1792.3	1448.0	1015.7	794.1	45.0	5.5	5.0	6.5	8.5
36°	2168.1	2111.0	1898.4	1555.6	1101.8	861.6	45.0	5.0	4.5	6.5	8.0
37°	2242.6	2176.1	1983.4	1638.2	1165.3	915.7	45.0	4.5	4.5	6.5	8.0
38°	2273.1	2216.1	2042.0	1711.2	1224.9	970.7	44.5	4.0	4.0	6.0	8.0
39°	2285.1	2234.1	2086.0	1763.8	1268.9	1007.7	43.5	3.5	4.0	6.0	8.0
40°	2269.6	2231.1	2108.5	1797.8	1303.9	1034.7	42.0	3.0	3.5	6.0	8.0
42.5°	2205.6	2180.1	2103.5	1831.8	1334.0	1054.8	36.5	2.0	3.5	5.5	8.0
45°	2148.5	2120.5	2053.0	1796.3	1294.9	1015.2	27.5	1.0	3.5	5.5	8.0
47.5°	2038.0	2020.5	1967.4	1705.7	1209.4	926.2	19.5	0.5	3.0	5.0	7.5
50°	1816.3	1799.8	1729.7	1481.1	1040.2	783.1	14.0	0.5	2.5	5.0	7.5
52.5°	1617.7	1600.2	1499.6	1231.4	799.1	573.9	9.0	0.5	2.5	5.0	7.5
55°	1377.5	1347.0	1214.9	934.7	566.4	384.8	6.5	0.5	2.5	4.5	7.5
57.5°	1019.7	975.2	857.1	637.5	326.2	208.7	3.5	0.5	2.5	4.5	7.5
60°	693.5	667.0	536.4	336.2	139.1	88.1	1.5	0.5	2.5	4.5	7.0
62.5°	420.3	386.8	269.7	143.1	60.0	40.0	0.0	1.0	2.5	4.5	7.0
65°	119.6	106.1	70.6	32.5	17.0	13.0	0.0	1.0	2.5	4.5	7.0
67.5°	4.0	4.0	4.0	3.5	2.5	2.5	0.5	1.0	2.5	4.5	6.5
70°	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.0	2.5	4.0	6.5
72.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	2.0	3.5	6.0
75°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.0	3.5	5.0
77.5°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.5	2.0	3.0	5.0
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0	3.0	4.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	1.5	2.0	2.0	3.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.0	1.5	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	1.5	1.5	1.0
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°	23.0	23.0
2.5°	21.5	21.5
5°	20.0	20.0
7.5°	18.5	18.5
10°	17.0	17.0
12.5°	16.0	16.0
15°	14.5	15.0
17.5°	13.5	14.0
20°	13.0	13.5
21°	13.0	13.5
22°	12.5	13.0
23°	12.5	13.0
24°	12.0	12.5
25°	11.5	12.0
26°	11.5	12.0
27°	11.5	12.0
28°	11.0	12.0
29°	11.0	11.5
30°	11.0	11.5
31°	10.5	11.5
32°	10.5	11.5
33°	10.5	11.0
34°	10.0	11.0
35°	10.0	11.0
36°	10.0	11.0
37°	10.0	10.5
38°	10.0	11.0
39°	10.0	10.5
40°	10.0	10.5
42.5°	10.0	10.5
45°	10.0	10.5
47.5°	10.0	11.0
50°	10.0	11.0
52.5°	10.0	11.0
55°	10.0	11.0
57.5°	10.0	10.5
60°	10.0	10.5
62.5°	9.5	10.5
65°	9.5	10.0
67.5°	9.5	10.0
70°	9.0	9.5
72.5°	8.5	9.0
75°	7.5	8.5
77.5°	7.0	7.5
80°	6.0	6.5

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	5.0	5.0
85°	3.5	4.0
87.5°	2.0	2.0
90°	0.0	0.0

(END OF REPORT)