

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: P1337808

Luminaire Tested: P3A05R309027DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337808
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: P3A05R309027DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

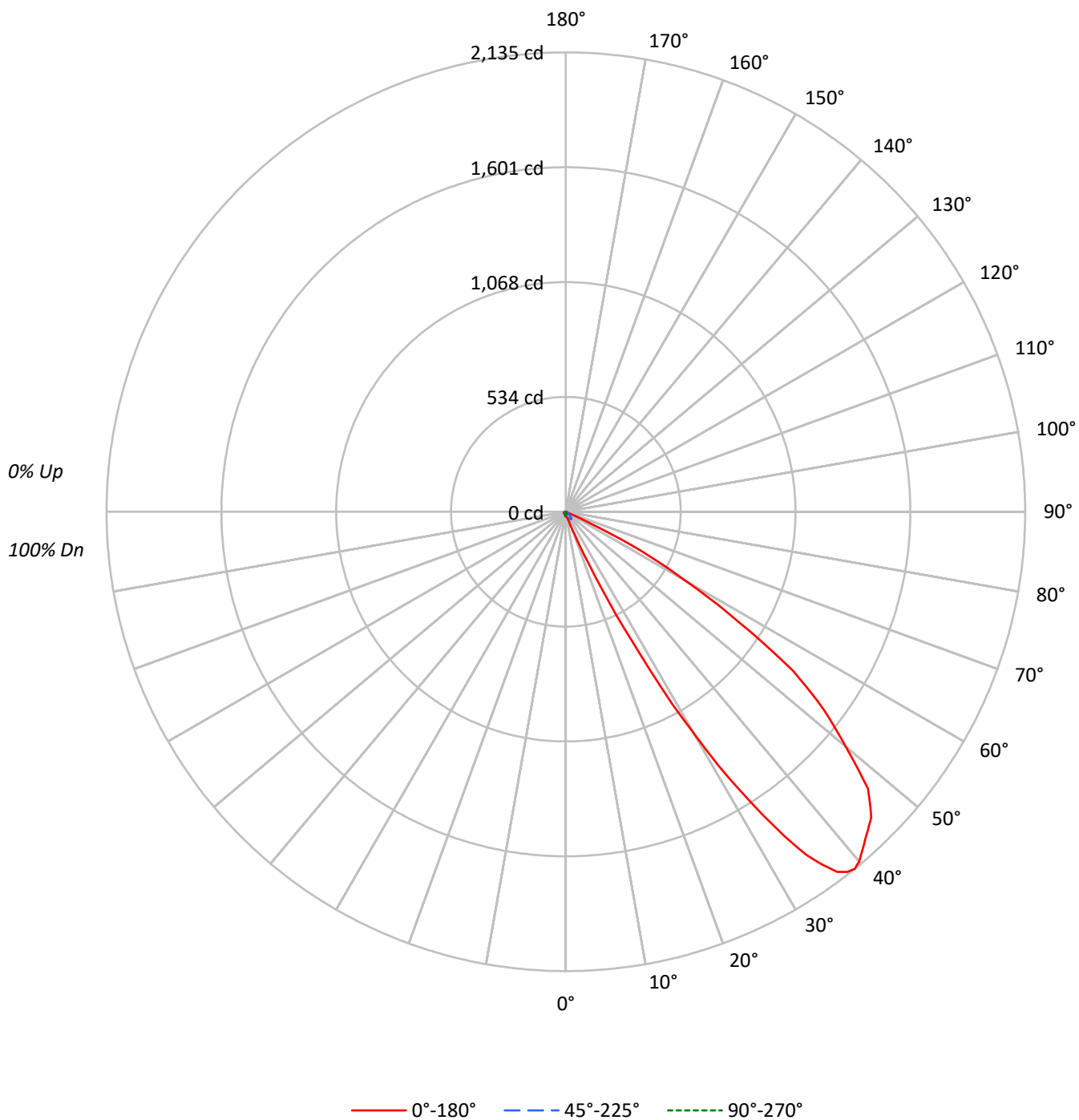
Lumens per Lamp: N/A
Luminaire Lumens: 555.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	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	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4715	4715	4715	4715	4715
5°	5041	4931	4622	4226	4116
10°	5522	4899	4052	3652	3540
15°	8059	4881	3405	3087	3178
20°	20302	5344	2614	2614	2940
25°	94215	6678	2032	2371	2710
30°	299970	9242	1545	2254	2735
35°	520501	11270	1258	2115	2757
40°	607023	11250	945	2147	2805
45°	622545	7970	1023	2326	3039
50°	578949	4469	785	2388	3514
55°	492064	2332	879	2676	3938
60°	284188	614	1009	2851	4298
65°	57957	0	1193	3373	4877
70°	898	321	1475	3911	5706
75°	763	424	1610	3982	6693
80°	631	631	2399	4672	7703
85°	0	1258	4780	4780	9309

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 622545 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.3
10°-20°	5.6	1.0
20°-30°	32.0	5.8
30°-40°	149.5	26.9
40°-50°	211.4	38.1
50°-60°	130.1	23.4
60°-70°	19.8	3.6
70°-80°	3.1	0.6
80°-90°	1.6	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°	39.6	7.1
0°-40°	189.0	34.1
0°-60°	530.5	95.6
0°-90°	555.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	555.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	23	22	21	19	19	2
15°	36	22	15	14	14	13
25°	389	28	8	10	11	240
35°	1944	42	5	8	10	1167
45°	2008	26	3	8	10	1522
55°	1287	6	2	7	10	1095
65°	112	0	2	6	9	202
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°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
2.5°	22.0	22.0	22.4	22.4	22.0	22.4	22.4	22.4	21.5	21.0	20.1
5°	22.9	22.9	22.9	23.4	22.9	22.9	22.4	22.0	21.0	19.6	19.2
7.5°	23.8	23.8	23.4	23.8	23.4	23.4	22.4	21.5	20.1	18.7	17.8
10°	24.8	24.8	24.3	24.3	23.8	23.8	22.0	20.6	18.2	16.8	16.4
12.5°	27.6	27.6	27.1	26.6	25.7	25.2	21.5	19.2	16.4	15.0	14.5
15°	35.5	35.1	34.1	32.7	30.4	29.9	21.5	17.8	15.0	13.6	13.6
17.5°	48.6	48.2	46.8	43.0	38.8	37.4	21.5	15.9	13.1	12.2	12.2
20°	87.0	83.2	76.2	66.9	57.0	51.9	22.9	14.0	11.2	10.8	11.2
21°	113.6	109.9	101.0	85.6	68.3	62.6	23.8	13.6	10.8	10.3	11.2
22°	154.7	150.5	132.3	111.3	86.5	76.7	24.3	12.6	9.8	9.8	10.8
23°	216.0	209.0	178.1	144.5	108.0	94.0	25.2	12.2	9.4	9.8	10.3
24°	282.8	276.8	241.7	191.2	137.9	117.8	26.2	11.7	8.9	8.9	9.8
25°	389.4	382.4	320.2	241.2	174.8	141.7	27.6	10.8	8.4	8.4	9.8
26°	527.3	495.1	412.3	310.9	215.5	177.7	29.0	10.3	7.9	8.4	9.4
27°	658.3	631.6	538.6	398.8	266.5	218.3	30.9	9.8	7.5	7.9	9.4
28°	830.3	792.9	675.5	504.4	335.7	264.1	32.7	9.4	7.0	7.9	8.9
29°	1022.9	970.5	828.9	623.2	413.7	315.6	34.6	8.9	6.5	7.5	8.9
30°	1184.7	1135.6	993.9	763.9	503.5	383.4	36.5	8.4	6.1	7.5	8.9
31°	1374.5	1300.1	1128.6	883.1	580.6	451.1	38.3	7.5	5.6	7.0	8.4
32°	1528.3	1476.4	1294.1	1017.8	682.1	525.9	39.7	7.0	5.6	7.0	8.4
33°	1677.0	1607.3	1431.0	1146.8	773.7	602.6	41.1	6.5	5.1	6.5	8.4
34°	1819.1	1755.0	1560.5	1251.1	860.2	675.5	42.1	5.6	5.1	6.5	7.9
35°	1944.4	1870.0	1674.6	1353.0	949.0	741.9	42.1	5.1	4.7	6.1	7.9
36°	2025.7	1972.4	1773.7	1453.5	1029.5	805.0	42.1	4.7	4.2	6.1	7.5
37°	2095.4	2033.2	1853.2	1530.6	1088.8	855.5	42.1	4.2	4.2	6.1	7.5
38°	2123.9	2070.6	1907.9	1598.9	1144.5	907.0	41.6	3.7	3.7	5.6	7.5
39°	2135.1	2087.4	1949.0	1648.0	1185.6	941.6	40.7	3.3	3.7	5.6	7.5
40°	2120.6	2084.6	1970.1	1679.8	1218.3	966.8	39.3	2.8	3.3	5.6	7.5
42.5°	2060.8	2036.9	1965.4	1711.5	1246.4	985.5	34.1	1.9	3.3	5.1	7.5
45°	2007.5	1981.3	1918.2	1678.4	1209.9	948.6	25.7	0.9	3.3	5.1	7.5
47.5°	1904.2	1887.8	1838.2	1593.7	1130.0	865.4	18.2	0.5	2.8	4.7	7.0
50°	1697.1	1681.6	1616.2	1383.8	972.0	731.7	13.1	0.5	2.3	4.7	7.0
52.5°	1511.5	1495.1	1401.1	1150.5	746.6	536.2	8.4	0.5	2.3	4.7	7.0
55°	1287.1	1258.5	1135.1	873.3	529.2	359.5	6.1	0.5	2.3	4.2	7.0
57.5°	952.8	911.2	800.8	595.6	304.8	195.0	3.3	0.5	2.3	4.2	7.0
60°	648.0	623.2	501.2	314.2	130.0	82.3	1.4	0.5	2.3	4.2	6.5
62.5°	392.7	361.4	252.0	133.7	56.1	37.4	0.0	0.9	2.3	4.2	6.5
65°	111.7	99.1	65.9	30.4	15.9	12.2	0.0	0.9	2.3	4.2	6.5
67.5°	3.7	3.7	3.7	3.3	2.3	2.3	0.5	0.9	2.3	4.2	6.1
70°	1.4	1.4	1.4	0.9	0.9	0.5	0.5	0.9	2.3	3.7	6.1
72.5°	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.9	1.9	3.3	5.6
75°	0.9	0.9	0.9	0.5	0.5	0.5	0.5	1.4	1.9	3.3	4.7
77.5°	0.9	0.9	0.9	0.5	0.5	0.5	0.5	1.4	1.9	2.8	4.7
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.4	1.9	2.8	3.7



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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	1.4	1.9	1.9	2.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.9	1.4	1.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.4	1.4	0.9
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°	21.5	21.5
2.5°	20.1	20.1
5°	18.7	18.7
7.5°	17.3	17.3
10°	15.9	15.9
12.5°	15.0	15.0
15°	13.6	14.0
17.5°	12.6	13.1
20°	12.2	12.6
21°	12.2	12.6
22°	11.7	12.2
23°	11.7	12.2
24°	11.2	11.7
25°	10.8	11.2
26°	10.8	11.2
27°	10.8	11.2
28°	10.3	11.2
29°	10.3	10.8
30°	10.3	10.8
31°	9.8	10.8
32°	9.8	10.8
33°	9.8	10.3
34°	9.4	10.3
35°	9.4	10.3
36°	9.4	10.3
37°	9.4	9.8
38°	9.4	10.3
39°	9.4	9.8
40°	9.4	9.8
42.5°	9.4	9.8
45°	9.4	9.8
47.5°	9.4	10.3
50°	9.4	10.3
52.5°	9.4	10.3
55°	9.4	10.3
57.5°	9.4	9.8
60°	9.4	9.8
62.5°	8.9	9.8
65°	8.9	9.4
67.5°	8.9	9.4
70°	8.4	8.9
72.5°	7.9	8.4
75°	7.0	7.9
77.5°	6.5	7.0
80°	5.6	6.1

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.7	4.7
85°	3.3	3.7
87.5°	1.9	1.9
90°	0.0	0.0

(END OF REPORT)