

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: P1336825

Luminaire Tested: P3A05R209030D2WDE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R209030D2WDE010 E3CA451MMS
Description: 3in Adjustable Dim to Warm LED luminaire with, R20 optic, 3000K CCT AND, 90CRI ,
E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

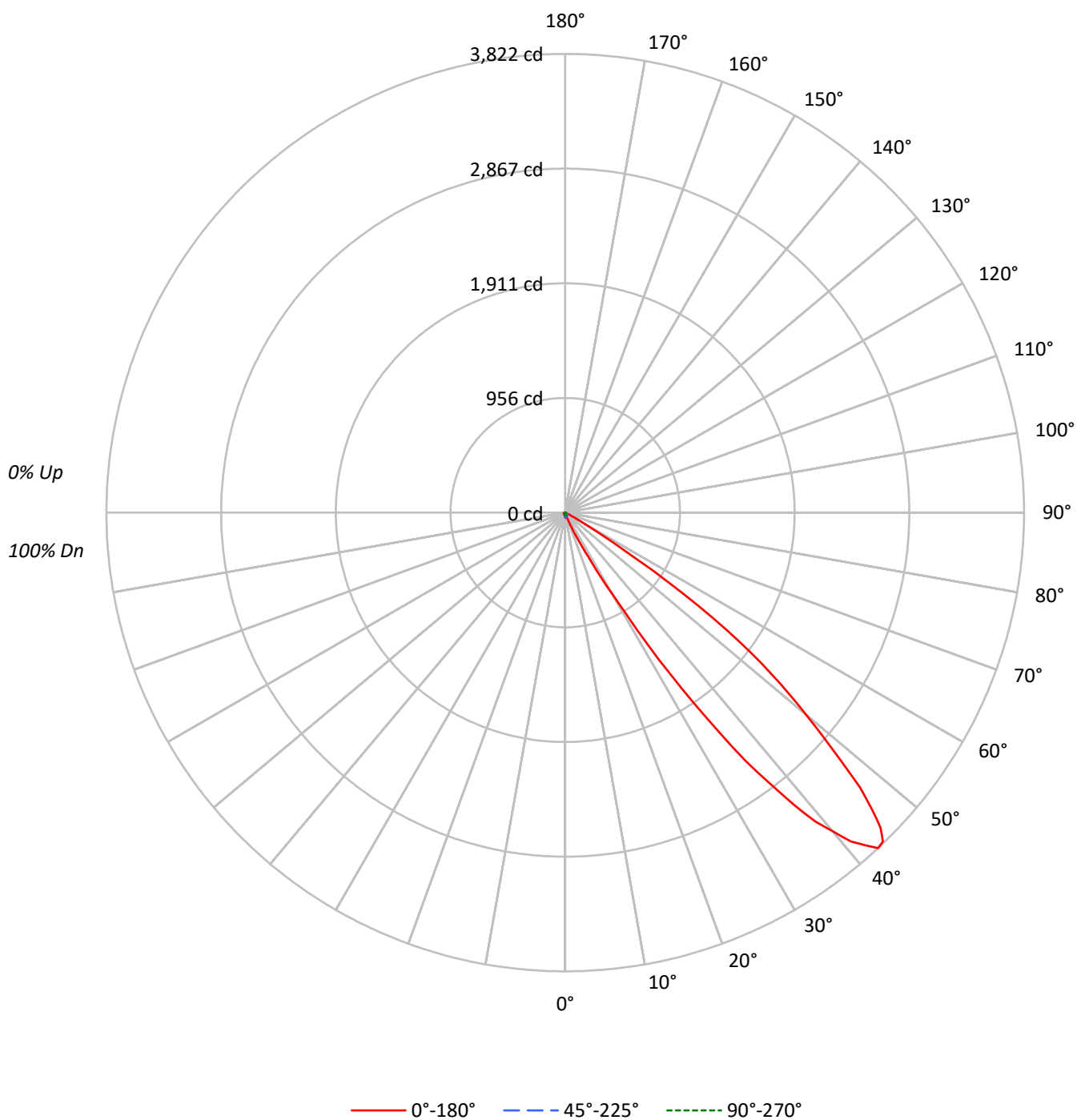
Lumens per Lamp: N/A
Luminaire Lumens: 531.1 lumens
Efficiency: N/A
Efficacy: 47.8 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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	0
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	101	97	100	97	94		96	94	92		92	91	89	87
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82	78	75	73
3	92	81	74	67	89	80	73	67	77	71	66		74	69	65		72	67	63	61
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	42
6	68	55	45	39	66	54	45	38	52	44	38		50	43	38		48	42	37	35
7	62	48	39	32	60	47	38	32	46	38	32		44	37	32		43	36	31	29
8	57	42	33	27	55	42	33	27	40	33	27		39	32	27		38	31	27	25
9	52	38	29	23	51	37	29	23	36	28	23		35	28	23		34	27	23	21
10	48	34	25	20	47	33	25	20	32	25	19		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8091	8091	8091	8091	8091
5°	9443	8783	7572	6582	6361
10°	9330	7994	5990	5121	5010
15°	8150	6107	4427	4086	4313
20°	12111	5134	3267	3500	3850
25°	52164	5323	2540	3145	3750
30°	197246	6431	2152	3038	3671
35°	597917	7736	2008	3078	3882
40°	991486	7700	1718	3292	4151
45°	1152430	5272	1551	3411	4497
50°	894572	2900	1535	3582	5117
55°	517755	1912	1529	4014	5543
60°	87537	439	1316	4166	6140
65°	6745	0	1557	4670	7005
70°	962	0	1923	5129	8014
75°	847	424	2118	5931	9320
80°	631	631	3157	6314	10734
85°	1258	1258	5032	6290	11322

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1152430 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.2	0.6
10°-20°	6.6	1.3
20°-30°	21.2	4.0
30°-40°	135.4	25.5
40°-50°	247.9	46.7
50°-60°	101.8	19.2
60°-70°	8.6	1.6
70°-80°	4.3	0.8
80°-90°	2.0	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°	31.0	5.8
0°-40°	166.4	31.3
0°-60°	516.2	97.2
0°-90°	531.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	531.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	37	37	37	37	37	
5°	43	40	34	30	29	4
15°	36	27	20	18	19	11
25°	216	22	10	13	16	142
35°	2234	29	8	12	14	1414
45°	3716	17	5	11	14	2668
55°	1354	5	4	10	14	1184
65°	13	0	3	9	14	42
75°	1	0	2	7	11	1
85°	0	0	2	2	4	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°	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
2.5°	40.4	40.4	40.4	39.9	39.9	40.4	39.9	39.9	39.9	39.9	39.4
5°	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.4	42.4	41.9	39.9
7.5°	43.9	43.9	43.9	43.9	43.4	43.4	43.4	43.4	42.9	42.4	38.9
10°	41.9	41.9	41.9	41.4	41.4	41.4	40.9	40.9	40.4	39.9	35.9
12.5°	37.9	37.9	37.9	37.9	37.4	37.4	36.9	36.9	36.4	35.9	31.4
15°	35.9	35.9	35.9	35.4	35.4	34.9	34.4	33.9	33.4	32.4	26.9
17.5°	38.9	38.9	38.4	38.4	37.4	36.4	35.9	34.4	33.4	31.9	24.0
20°	51.9	52.4	50.4	48.9	47.9	44.9	43.4	40.9	38.9	36.4	22.0
22.5°	104.8	102.8	99.3	93.8	87.3	81.8	71.9	63.9	58.4	50.9	21.5
25°	215.6	213.6	204.1	196.1	176.2	160.7	139.2	121.8	103.8	86.3	22.0
27.5°	409.7	396.2	393.7	357.3	329.4	289.4	248.0	213.1	181.1	145.7	23.5
30°	779.0	763.5	709.1	654.2	578.9	493.5	412.2	336.3	273.0	215.6	25.4
31°	988.5	1003.5	939.6	829.4	718.1	608.8	497.5	401.2	319.4	248.0	26.4
32°	1299.4	1234.1	1166.7	1053.4	891.7	752.0	612.3	473.6	365.8	282.9	27.4
33°	1593.4	1554.9	1452.1	1310.9	1116.8	920.7	739.5	558.9	422.7	325.4	27.9
34°	1906.7	1864.3	1781.0	1578.4	1365.3	1108.3	866.8	657.2	490.5	366.8	28.4
35°	2233.6	2215.6	2054.9	1879.3	1617.3	1307.4	1020.0	765.0	556.9	404.7	28.9
36°	2562.4	2504.6	2378.8	2122.3	1848.9	1491.6	1180.7	865.3	624.3	449.6	28.9
37°	2810.0	2797.0	2630.3	2380.3	2058.9	1688.2	1319.4	976.6	692.1	488.0	28.9
38°	3082.9	3031.5	2862.4	2607.9	2256.5	1868.3	1464.6	1073.4	756.5	523.0	28.4
39°	3313.0	3236.6	3066.0	2814.4	2429.2	2005.0	1579.9	1167.2	813.4	551.9	27.9
40°	3463.7	3410.8	3232.6	2949.7	2585.9	2134.3	1696.7	1244.5	855.8	573.9	26.9
41°	3629.8	3542.0	3365.9	3081.4	2699.7	2248.1	1770.0	1295.4	888.7	588.3	25.9
42°	3729.1	3657.3	3448.2	3169.7	2781.0	2312.9	1829.9	1334.4	908.7	595.8	24.0
43°	3822.0	3724.2	3520.6	3221.1	2834.9	2358.8	1857.3	1352.3	913.2	595.8	21.5
44°	3809.5	3716.7	3505.6	3228.1	2846.9	2372.3	1868.8	1352.8	906.2	588.3	19.0
45°	3716.2	3623.8	3433.7	3167.3	2804.0	2345.9	1845.9	1332.9	886.8	575.4	17.0
46°	3545.0	3453.2	3307.5	3065.5	2724.1	2286.0	1792.5	1289.5	854.3	554.4	15.0
47°	3358.9	3269.5	3120.3	2901.3	2587.9	2179.2	1715.1	1228.6	808.9	524.0	13.5
48°	3088.9	3033.0	2883.3	2696.2	2398.8	2012.0	1579.4	1129.3	748.0	484.5	11.5
49°	2850.4	2791.5	2660.3	2459.1	2152.3	1817.4	1417.2	1008.5	668.7	440.6	10.0
50°	2622.3	2570.9	2449.7	2222.6	1929.7	1582.4	1198.1	856.3	568.9	386.2	8.5
51°	2399.3	2360.8	2237.1	2028.5	1731.1	1401.7	1038.0	713.1	470.1	320.4	8.0
52°	2175.2	2170.7	2036.5	1825.4	1538.0	1221.6	882.3	601.8	398.7	269.0	7.5
53°	1934.2	1905.2	1788.0	1598.3	1322.4	1034.0	748.0	507.5	343.3	229.0	6.5
54°	1659.7	1627.3	1501.5	1330.4	1080.4	846.8	602.8	410.2	285.9	193.6	6.0
55°	1354.3	1298.9	1207.6	1032.0	843.8	646.2	465.6	324.9	228.5	161.2	5.0
56°	1027.5	972.1	920.7	791.4	619.3	482.0	346.8	249.0	178.6	127.2	4.5
57°	714.6	711.6	627.3	528.0	414.2	328.4	237.5	175.7	126.3	98.8	3.5
58°	463.6	448.1	394.2	336.8	271.0	205.1	152.7	119.3	85.8	67.4	3.0
59°	324.9	293.9	265.0	224.6	170.7	129.2	98.3	76.3	59.4	46.9	2.0
60°	199.6	193.1	173.7	136.7	110.8	91.3	73.4	56.4	43.4	33.4	1.0
62.5°	56.9	57.9	52.4	46.4	39.9	34.4	30.9	26.4	22.0	17.5	0.0
65°	13.0	12.5	13.5	12.5	11.5	11.5	10.0	9.0	8.0	7.5	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°	4.0	4.0	3.5	3.5	3.5	3.0	3.0	2.5	2.5	2.0	0.0
70°	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	0.5	0.5	0.0
72.5°	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
77.5°	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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°	36.9	36.9	36.9	36.9	36.9	36.9
2.5°	38.4	36.4	34.9	33.4	32.9	32.9
5°	37.4	34.4	31.4	29.9	28.9	28.9
7.5°	34.4	30.9	27.9	26.4	25.9	25.9
10°	30.9	26.9	24.0	23.0	23.0	22.5
12.5°	26.9	23.0	21.0	20.5	20.5	20.5
15°	22.5	19.5	18.0	18.0	18.5	19.0
17.5°	19.0	16.0	15.5	16.5	17.5	17.5
20°	16.0	14.0	14.0	15.0	16.0	16.5
22.5°	13.5	12.0	12.5	14.0	15.5	16.0
25°	12.0	10.5	11.5	13.0	14.5	15.5
27.5°	10.0	9.5	10.5	12.5	14.5	15.0
30°	8.5	8.5	10.0	12.0	14.0	14.5
31°	8.0	8.0	10.0	12.0	14.0	14.5
32°	7.5	8.0	9.5	12.0	14.0	14.5
33°	7.0	7.5	9.5	11.5	14.0	14.5
34°	6.5	7.5	9.5	11.5	14.0	14.5
35°	6.0	7.5	9.5	11.5	14.0	14.5
36°	5.5	7.0	9.0	11.5	14.0	14.5
37°	5.0	7.0	9.0	11.5	14.0	14.5
38°	4.5	6.5	9.0	11.5	14.0	14.5
39°	4.5	6.5	8.5	11.5	13.5	14.5
40°	4.0	6.0	8.5	11.5	13.5	14.5
41°	3.5	6.0	8.5	11.0	13.5	14.5
42°	3.0	5.5	8.0	11.0	13.5	14.5
43°	2.5	5.5	8.0	11.0	13.5	14.5
44°	2.5	5.0	8.0	11.0	13.5	14.5
45°	2.0	5.0	8.0	11.0	13.5	14.5
46°	1.5	5.0	8.0	11.0	13.5	14.5
47°	1.5	4.5	7.5	11.0	13.5	14.5
48°	1.0	4.5	7.5	11.0	13.5	14.5
49°	1.0	4.5	7.5	11.0	13.5	15.0
50°	1.0	4.5	7.5	10.5	13.5	15.0
51°	0.5	4.5	7.5	10.5	13.5	15.0
52°	0.5	4.5	7.0	10.5	14.0	15.0
53°	0.5	4.0	7.0	10.5	14.0	15.0
54°	0.5	4.0	7.0	10.5	14.0	14.5
55°	0.5	4.0	7.0	10.5	13.5	14.5
56°	0.5	3.5	7.0	10.5	13.5	14.5
57°	0.5	3.5	6.5	10.0	13.5	14.0
58°	0.5	3.5	6.5	10.0	13.5	14.0
59°	0.5	3.5	6.5	10.0	13.0	14.0
60°	1.0	3.0	6.0	9.5	13.0	14.0
62.5°	1.0	3.0	6.0	9.5	12.5	13.5
65°	1.0	3.0	5.5	9.0	12.5	13.5



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	2.5	5.0	8.5	12.0	13.0
70°	1.0	3.0	5.0	8.0	11.5	12.5
72.5°	1.5	2.5	4.5	7.5	11.0	12.0
75°	1.5	2.5	4.5	7.0	10.5	11.0
77.5°	2.0	2.5	4.0	6.0	9.5	10.0
80°	2.0	2.5	3.5	5.0	8.0	8.5
82.5°	2.0	2.5	2.5	4.0	6.0	6.5
85°	1.5	2.0	2.0	2.5	4.0	4.5
87.5°	1.5	2.0	1.5	1.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)