

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: P1337477

Luminaire Tested: P3A05R259830DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337477
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R259830DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 3000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

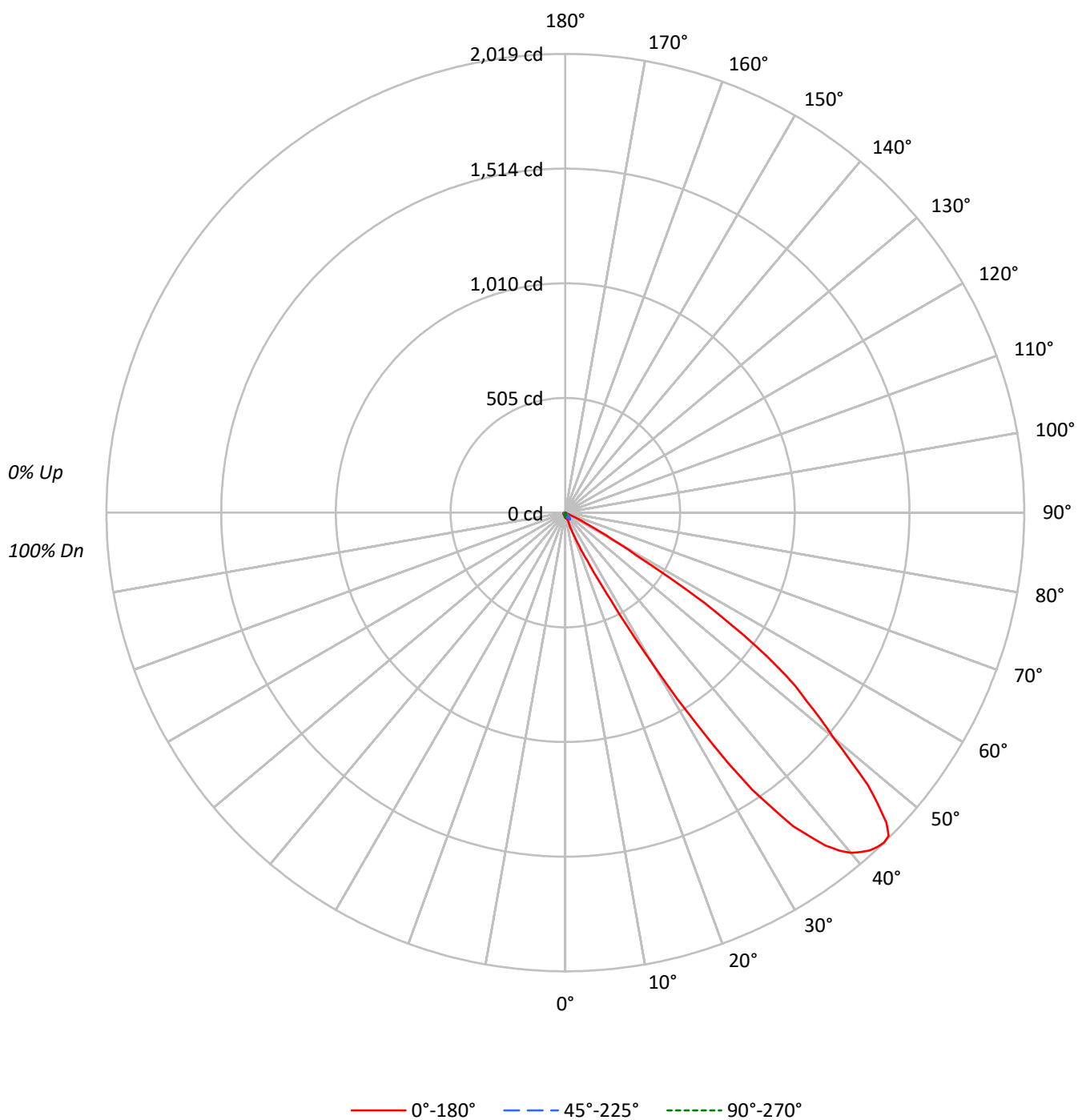
Lumens per Lamp: N/A
Luminaire Lumens: 421.0 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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	64	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	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	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	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4715	4715	4715	4715	4715
5°	5393	5129	4556	4072	4006
10°	5366	4876	3874	3384	3384
15°	5971	4200	3019	2860	3019
20°	21095	4154	2334	2427	2684
25°	60681	5299	1887	2250	2589
30°	193625	8153	1494	2152	2633
35°	424051	9610	1285	2088	2677
40°	559391	8702	1059	2118	2863
45°	623848	6078	1023	2295	3101
50°	525117	3173	1023	2388	3411
55°	392588	1262	994	2676	3823
60°	121525	307	965	2938	4210
65°	10377	0	1141	3061	4618
70°	705	256	1218	3590	5257
75°	593	339	1610	3728	5931
80°	505	505	2399	4167	7072
85°	1006	1006	3774	4780	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 623848 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.5
10°-20°	5.0	1.2
20°-30°	23.3	5.5
30°-40°	112.1	26.6
40°-50°	175.8	41.8
50°-60°	90.1	21.4
60°-70°	8.5	2.0
70°-80°	2.9	0.7
80°-90°	1.4	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°	30.2	7.2
0°-40°	142.3	33.8
0°-60°	408.2	97.0
0°-90°	421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	421.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	24	23	21	18	18	2
15°	26	18	13	13	13	11
25°	251	22	8	9	11	156
35°	1584	36	5	8	10	962
45°	2012	20	3	7	10	1472
55°	1027	3	3	7	10	855
65°	20	0	2	6	9	63
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°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
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°	23.3	23.3	23.3	23.3	23.3	23.3	23.0	23.0	23.3	23.0	23.0
5°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.1	24.1	24.1	23.3
7.5°	24.8	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.1	24.1	23.0
10°	24.1	24.1	24.1	24.1	23.7	23.7	23.7	23.3	23.3	23.3	21.9
12.5°	24.1	24.1	24.1	24.1	23.7	23.7	23.3	23.3	23.0	22.6	20.0
15°	26.3	26.3	26.3	25.9	25.6	25.2	24.8	24.5	24.1	23.3	18.5
17.5°	38.5	37.4	37.0	35.6	33.7	31.9	30.4	28.9	27.4	26.3	17.8
20°	90.4	90.0	88.2	83.7	78.9	73.4	67.8	61.5	52.6	46.7	17.8
22.5°	156.7	154.5	151.2	147.8	139.3	129.3	118.9	107.1	95.6	83.4	18.9
25°	250.8	256.0	244.9	236.0	221.2	203.0	183.4	167.1	146.3	127.1	21.9
27.5°	436.0	439.4	417.5	388.6	354.2	316.0	279.0	251.2	216.4	184.5	27.4
30°	764.7	768.0	731.3	669.8	598.7	536.1	451.2	376.8	308.2	255.3	32.2
31°	954.3	928.4	885.8	826.1	736.1	641.7	539.8	449.8	363.1	293.4	33.7
32°	1119.2	1117.0	1067.3	976.9	886.5	769.8	643.5	526.1	419.7	331.9	34.8
33°	1313.7	1298.9	1228.8	1143.6	1024.0	906.5	743.5	609.4	477.9	374.9	35.6
34°	1469.7	1429.6	1400.7	1303.3	1177.0	1027.3	852.8	697.6	550.5	416.4	35.9
35°	1584.1	1575.6	1519.3	1428.5	1300.0	1147.0	970.6	789.1	611.3	464.6	35.9
36°	1705.3	1679.0	1624.1	1541.9	1416.7	1258.5	1060.7	868.4	682.0	507.9	35.6
37°	1781.2	1765.7	1711.2	1626.4	1503.7	1352.6	1161.4	952.1	738.3	551.3	34.8
38°	1859.4	1827.9	1774.2	1693.0	1572.6	1430.8	1234.4	1016.6	790.2	589.4	33.7
39°	1913.5	1880.9	1826.0	1745.3	1627.5	1486.7	1292.2	1071.4	835.4	617.9	32.2
40°	1954.2	1922.7	1867.2	1784.2	1667.9	1530.8	1340.4	1119.9	873.2	642.8	30.4
41°	1979.4	1950.2	1895.0	1812.3	1695.6	1556.0	1371.9	1151.4	898.8	659.4	28.5
42°	2000.5	1970.5	1914.2	1829.8	1712.7	1577.5	1391.1	1171.4	916.2	668.0	27.0
43°	2012.4	1982.4	1927.6	1841.2	1723.1	1587.5	1401.5	1180.7	922.1	666.8	24.5
44°	2019.1	1987.9	1932.7	1846.4	1727.5	1590.1	1402.2	1178.8	918.0	658.0	22.2
45°	2011.7	1980.9	1927.6	1841.2	1719.7	1581.9	1394.8	1168.8	902.5	640.5	19.6
46°	1963.5	1939.8	1890.9	1811.6	1695.3	1561.2	1375.9	1149.6	878.4	619.1	16.7
47°	1878.7	1859.8	1812.3	1753.4	1648.2	1523.0	1341.1	1112.9	844.7	586.8	13.3
48°	1790.1	1762.3	1718.2	1657.9	1568.9	1454.5	1283.7	1059.2	793.5	544.6	11.9
49°	1659.3	1643.0	1604.1	1536.7	1463.0	1362.2	1202.5	990.3	730.9	498.7	10.4
50°	1539.3	1528.2	1473.7	1424.1	1345.9	1251.8	1092.5	899.5	653.1	441.6	9.3
51°	1445.6	1432.2	1393.0	1331.1	1247.7	1138.5	988.4	781.7	563.9	373.8	7.4
52°	1347.8	1340.4	1305.5	1241.8	1159.9	1051.0	887.3	681.7	477.2	316.0	5.9
53°	1267.7	1257.0	1214.4	1157.7	1069.2	956.6	777.6	588.7	404.2	265.6	5.2
54°	1151.1	1146.6	1119.2	1059.9	964.0	841.3	678.3	495.7	337.1	225.2	4.4
55°	1026.9	1012.1	984.3	937.3	849.1	734.6	563.5	410.9	272.7	189.7	3.3
56°	875.8	875.1	825.4	786.1	708.0	586.5	450.1	320.8	221.5	158.2	3.0
57°	731.3	708.0	660.2	621.3	537.2	444.9	334.2	240.4	173.4	128.2	2.2
58°	540.9	528.7	516.1	459.0	381.2	315.3	238.6	168.9	128.2	97.8	1.5
59°	367.1	366.8	351.9	308.6	263.8	196.3	148.9	114.8	88.2	71.9	1.1
60°	277.1	270.4	240.8	212.3	166.0	124.1	88.2	67.8	54.8	46.3	0.7
62.5°	97.1	100.8	88.5	73.4	55.9	45.9	35.2	28.5	23.3	18.9	0.0
65°	20.0	21.9	18.9	17.8	14.1	12.2	10.7	9.3	7.8	6.7	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°	2.6	2.2	2.2	2.2	1.9	1.9	1.9	1.9	1.5	1.5	0.4
70°	1.1	1.1	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.4
72.5°	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	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	0.4	0.4
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
85°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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°	21.5	21.5	21.5	21.5	21.5	21.5
2.5°	22.6	21.9	20.7	20.4	20.0	20.0
5°	22.2	20.7	19.6	18.5	18.2	18.2
7.5°	21.1	19.3	17.8	17.0	16.7	16.3
10°	20.0	17.4	15.9	15.2	15.2	15.2
12.5°	17.8	15.6	14.1	13.7	14.1	14.1
15°	15.9	13.3	12.6	12.6	13.0	13.3
17.5°	13.7	11.9	11.1	11.5	11.9	12.2
20°	12.2	10.0	10.0	10.4	11.5	11.5
22.5°	10.7	8.9	8.9	10.0	10.7	11.1
25°	9.6	7.8	8.2	9.3	10.4	10.7
27.5°	8.2	6.7	7.4	8.9	10.0	10.4
30°	7.0	5.9	7.0	8.5	9.6	10.4
31°	6.7	5.6	7.0	8.2	9.6	10.4
32°	5.9	5.6	6.7	8.2	9.6	10.0
33°	5.6	5.2	6.7	8.2	9.6	10.0
34°	5.2	4.8	6.3	8.2	9.6	10.0
35°	4.4	4.8	6.3	7.8	9.3	10.0
36°	4.1	4.4	6.3	7.8	9.3	10.0
37°	3.7	4.4	5.9	7.8	9.3	10.0
38°	3.3	4.1	5.9	7.8	9.3	10.0
39°	3.0	4.1	5.6	7.8	9.3	10.0
40°	2.6	3.7	5.6	7.4	9.3	10.0
41°	2.6	3.7	5.6	7.4	9.3	10.0
42°	2.2	3.7	5.6	7.4	9.3	10.0
43°	1.9	3.3	5.6	7.4	9.3	10.0
44°	1.5	3.3	5.2	7.4	9.3	10.0
45°	1.5	3.3	5.2	7.4	9.3	10.0
46°	1.1	3.0	5.2	7.4	9.3	10.0
47°	0.7	3.0	5.2	7.0	9.3	10.0
48°	0.7	3.0	5.2	7.0	9.3	10.0
49°	0.7	3.0	4.8	7.0	9.3	10.0
50°	0.7	3.0	4.8	7.0	9.3	10.0
51°	0.4	2.6	4.8	7.0	9.3	10.0
52°	0.4	2.6	4.8	7.0	9.3	10.4
53°	0.4	2.6	4.8	7.0	9.3	10.0
54°	0.4	2.6	4.4	7.0	9.3	10.0
55°	0.4	2.6	4.4	7.0	9.3	10.0
56°	0.4	2.2	4.4	6.7	9.3	10.0
57°	0.7	2.2	4.4	6.7	9.3	9.6
58°	0.7	2.2	4.4	6.7	8.9	9.6
59°	0.7	2.2	4.4	6.7	8.9	9.6
60°	0.7	2.2	4.1	6.7	8.9	9.6
62.5°	0.7	2.2	4.1	6.3	8.5	9.3
65°	0.7	2.2	3.7	5.9	8.5	8.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	1.9	3.7	5.6	8.2	8.5
70°	1.1	1.9	3.3	5.6	7.8	8.2
72.5°	1.1	1.9	3.3	4.8	7.0	7.8
75°	1.1	1.9	3.0	4.4	6.7	7.0
77.5°	1.1	1.9	2.6	4.1	5.9	6.3
80°	1.5	1.9	2.2	3.3	5.2	5.6
82.5°	1.5	1.9	1.9	2.6	4.1	4.4
85°	1.1	1.5	1.5	1.9	2.6	3.0
87.5°	1.1	1.5	1.1	0.7	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)