

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: P1334643

Luminaire Tested: P3A02R259027DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1334643
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: P3A02R259027DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

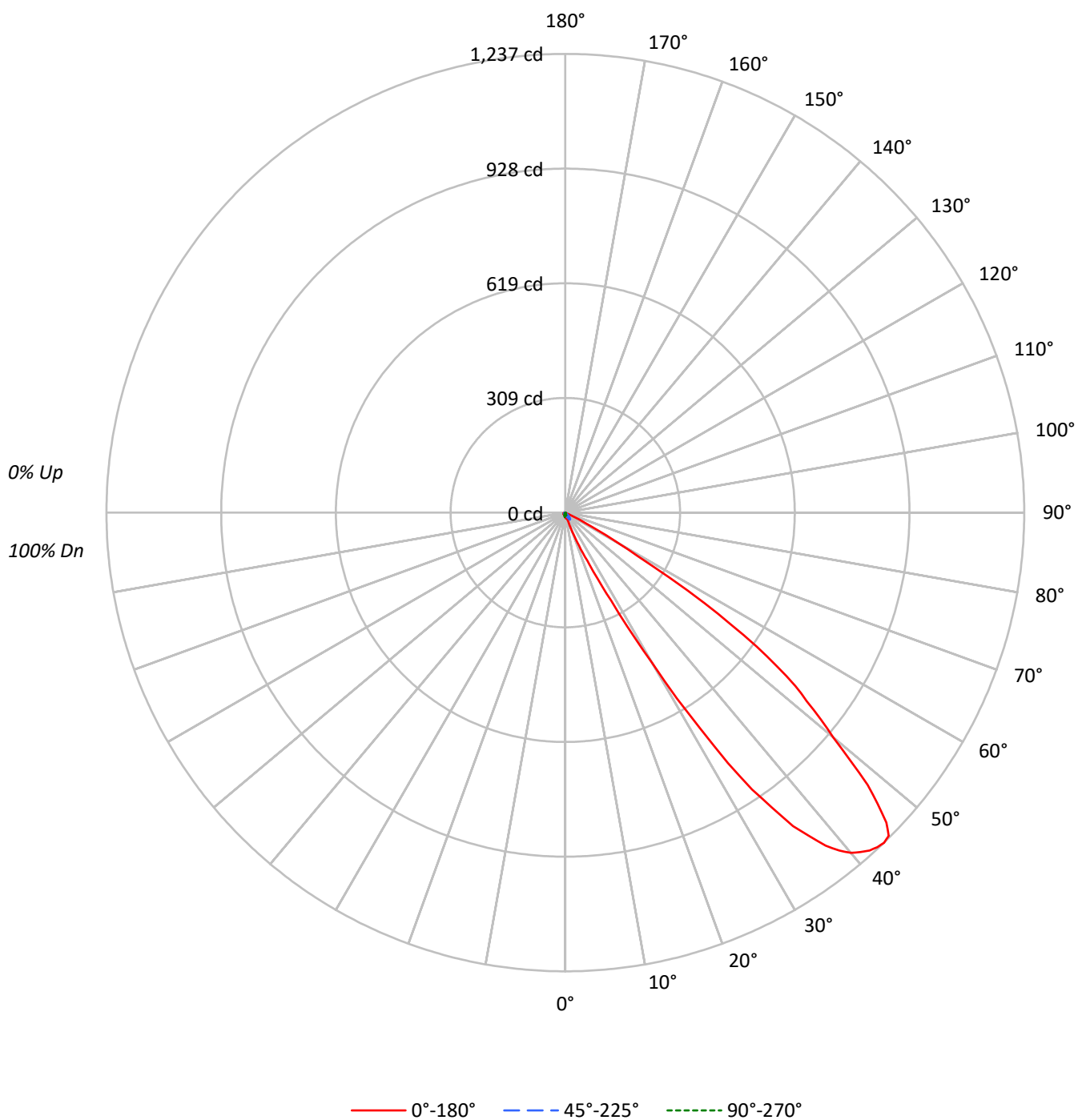
Lumens per Lamp: N/A
Luminaire Lumens: 258.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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	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°	2895	2895	2895	2895	2895
5°	3302	3148	2796	2509	2443
10°	3295	2984	2382	2071	2071
15°	3655	2588	1862	1748	1862
20°	12928	2544	1423	1493	1633
25°	37188	3242	1161	1379	1597
30°	118651	5013	912	1317	1621
35°	259876	5889	803	1285	1633
40°	342814	5324	658	1288	1746
45°	382303	3721	620	1395	1892
50°	321798	1944	614	1467	2081
55°	240584	765	612	1644	2332
60°	74468	219	614	1798	2588
65°	6382	0	726	1868	2802
70°	449	128	705	2180	3206
75°	424	169	932	2288	3643
80°	253	253	1389	2526	4293
85°	503	503	2264	2768	4529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 382303 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.5
10°-20°	3.0	1.2
20°-30°	14.3	5.5
30°-40°	68.7	26.6
40°-50°	107.7	41.8
50°-60°	55.2	21.4
60°-70°	5.2	2.0
70°-80°	1.7	0.7
80°-90°	0.9	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°	18.5	7.2
0°-40°	87.2	33.8
0°-60°	250.2	97.0
0°-90°	258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	258.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13	13	13	13	13	
5°	15	14	13	11	11	1
15°	16	11	8	8	8	7
25°	154	13	5	6	7	95
35°	971	22	3	5	6	589
45°	1233	12	2	4	6	902
55°	629	2	2	4	6	524
65°	12	0	1	4	5	38
75°	0	0	1	3	4	1
85°	0	0	1	1	2	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°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
2.5°	14.3	14.3	14.3	14.3	14.3	14.3	14.1	14.1	14.3	14.1	14.1
5°	15.0	15.0	15.0	15.0	15.0	15.0	15.0	14.8	14.8	14.8	14.3
7.5°	15.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0	14.8	14.8	14.1
10°	14.8	14.8	14.8	14.8	14.5	14.5	14.5	14.3	14.3	14.3	13.4
12.5°	14.8	14.8	14.8	14.8	14.5	14.5	14.3	14.3	14.1	13.8	12.3
15°	16.1	16.1	16.1	15.9	15.7	15.4	15.2	15.0	14.8	14.3	11.4
17.5°	23.6	22.9	22.7	21.8	20.7	19.5	18.6	17.7	16.8	16.1	10.9
20°	55.4	55.2	54.0	51.3	48.4	45.0	41.5	37.7	32.2	28.6	10.9
22.5°	96.0	94.7	92.6	90.6	85.4	79.2	72.9	65.6	58.6	51.1	11.6
25°	153.7	156.9	150.1	144.6	135.5	124.4	112.4	102.4	89.7	77.9	13.4
27.5°	267.2	269.3	255.9	238.2	217.0	193.7	171.0	153.9	132.6	113.1	16.8
30°	468.6	470.6	448.2	410.5	366.9	328.5	276.5	230.9	188.9	156.4	19.8
31°	584.8	568.9	542.8	506.3	451.1	393.2	330.8	275.6	222.5	179.8	20.7
32°	685.9	684.5	654.1	598.7	543.3	471.8	394.4	322.4	257.2	203.4	21.3
33°	805.1	796.0	753.1	700.9	627.5	555.6	455.7	373.5	292.9	229.8	21.8
34°	900.6	876.1	858.4	798.7	721.3	629.6	522.6	427.5	337.4	255.2	22.0
35°	970.8	965.6	931.1	875.4	796.7	702.9	594.8	483.6	374.6	284.7	22.0
36°	1045.0	1028.9	995.3	944.9	868.2	771.2	650.0	532.2	418.0	311.3	21.8
37°	1091.6	1082.0	1048.7	996.7	921.5	828.9	711.8	583.5	452.5	337.8	21.3
38°	1139.5	1120.2	1087.3	1037.5	963.8	876.8	756.5	623.0	484.3	361.2	20.7
39°	1172.6	1152.7	1119.1	1069.6	997.4	911.1	791.9	656.6	512.0	378.7	19.8
40°	1197.6	1178.3	1144.3	1093.4	1022.1	938.1	821.4	686.3	535.1	393.9	18.6
41°	1213.0	1195.1	1161.3	1110.6	1039.1	953.5	840.7	705.6	550.8	404.1	17.5
42°	1226.0	1207.6	1173.1	1121.3	1049.6	966.7	852.5	717.9	561.5	409.3	16.6
43°	1233.2	1214.9	1181.3	1128.4	1055.9	972.8	858.9	723.6	565.1	408.7	15.0
44°	1237.3	1218.3	1184.4	1131.5	1058.7	974.4	859.3	722.4	562.6	403.2	13.6
45°	1232.8	1214.0	1181.3	1128.4	1053.9	969.4	854.8	716.3	553.1	392.5	12.0
46°	1203.3	1188.7	1158.8	1110.2	1038.9	956.7	843.2	704.5	538.3	379.4	10.2
47°	1151.3	1139.7	1110.6	1074.6	1010.1	933.3	821.9	682.0	517.6	359.6	8.2
48°	1097.0	1080.0	1053.0	1016.0	961.5	891.3	786.7	649.1	486.3	333.7	7.3
49°	1016.9	1006.9	983.1	941.7	896.6	834.8	737.0	606.9	447.9	305.6	6.4
50°	943.3	936.5	903.1	872.7	824.8	767.1	669.5	551.2	400.3	270.6	5.7
51°	885.9	877.7	853.6	815.7	764.7	697.7	605.7	479.0	345.5	229.1	4.5
52°	825.9	821.4	800.1	761.0	710.8	644.1	543.7	417.7	292.4	193.7	3.6
53°	776.9	770.3	744.2	709.5	655.2	586.2	476.5	360.8	247.7	162.8	3.2
54°	705.4	702.7	685.9	649.5	590.7	515.6	415.7	303.8	206.6	138.0	2.7
55°	629.3	620.3	603.2	574.4	520.4	450.2	345.3	251.8	167.1	116.2	2.0
56°	536.7	536.3	505.8	481.8	433.9	359.4	275.8	196.6	135.8	96.9	1.8
57°	448.2	433.9	404.6	380.7	329.2	272.7	204.8	147.3	106.3	78.6	1.4
58°	331.5	324.0	316.3	281.3	233.6	193.2	146.2	103.5	78.6	59.9	0.9
59°	225.0	224.8	215.7	189.1	161.6	120.3	91.3	70.4	54.0	44.0	0.7
60°	169.8	165.7	147.6	130.1	101.7	76.1	54.0	41.5	33.6	28.4	0.5
62.5°	59.5	61.8	54.3	45.0	34.3	28.2	21.6	17.5	14.3	11.6	0.0
65°	12.3	13.4	11.6	10.9	8.6	7.5	6.6	5.7	4.8	4.1	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°	1.6	1.4	1.4	1.4	1.1	1.1	1.1	1.1	0.9	0.9	0.2
70°	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.2
72.5°	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
77.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5
85°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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°	13.2	13.2	13.2	13.2	13.2	13.2
2.5°	13.8	13.4	12.7	12.5	12.3	12.3
5°	13.6	12.7	12.0	11.4	11.1	11.1
7.5°	12.9	11.8	10.9	10.4	10.2	10.0
10°	12.3	10.7	9.8	9.3	9.3	9.3
12.5°	10.9	9.5	8.6	8.4	8.6	8.6
15°	9.8	8.2	7.7	7.7	7.9	8.2
17.5°	8.4	7.3	6.8	7.0	7.3	7.5
20°	7.5	6.1	6.1	6.4	7.0	7.0
22.5°	6.6	5.4	5.4	6.1	6.6	6.8
25°	5.9	4.8	5.0	5.7	6.4	6.6
27.5°	5.0	4.1	4.5	5.4	6.1	6.4
30°	4.3	3.6	4.3	5.2	5.9	6.4
31°	4.1	3.4	4.3	5.0	5.9	6.4
32°	3.6	3.4	4.1	5.0	5.9	6.1
33°	3.4	3.2	4.1	5.0	5.9	6.1
34°	3.2	3.0	3.9	5.0	5.9	6.1
35°	2.7	3.0	3.9	4.8	5.7	6.1
36°	2.5	2.7	3.9	4.8	5.7	6.1
37°	2.3	2.7	3.6	4.8	5.7	6.1
38°	2.0	2.5	3.6	4.8	5.7	6.1
39°	1.8	2.5	3.4	4.8	5.7	6.1
40°	1.6	2.3	3.4	4.5	5.7	6.1
41°	1.6	2.3	3.4	4.5	5.7	6.1
42°	1.4	2.3	3.4	4.5	5.7	6.1
43°	1.1	2.0	3.4	4.5	5.7	6.1
44°	0.9	2.0	3.2	4.5	5.7	6.1
45°	0.9	2.0	3.2	4.5	5.7	6.1
46°	0.7	1.8	3.2	4.5	5.7	6.1
47°	0.5	1.8	3.2	4.3	5.7	6.1
48°	0.5	1.8	3.2	4.3	5.7	6.1
49°	0.5	1.8	3.0	4.3	5.7	6.1
50°	0.5	1.8	3.0	4.3	5.7	6.1
51°	0.2	1.6	3.0	4.3	5.7	6.1
52°	0.2	1.6	3.0	4.3	5.7	6.4
53°	0.2	1.6	3.0	4.3	5.7	6.1
54°	0.2	1.6	2.7	4.3	5.7	6.1
55°	0.2	1.6	2.7	4.3	5.7	6.1
56°	0.2	1.4	2.7	4.1	5.7	6.1
57°	0.5	1.4	2.7	4.1	5.7	5.9
58°	0.5	1.4	2.7	4.1	5.4	5.9
59°	0.5	1.4	2.7	4.1	5.4	5.9
60°	0.5	1.4	2.5	4.1	5.4	5.9
62.5°	0.5	1.4	2.5	3.9	5.2	5.7
65°	0.5	1.4	2.3	3.6	5.2	5.4



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.1	2.3	3.4	5.0	5.2
70°	0.7	1.1	2.0	3.4	4.8	5.0
72.5°	0.7	1.1	2.0	3.0	4.3	4.8
75°	0.7	1.1	1.8	2.7	4.1	4.3
77.5°	0.7	1.1	1.6	2.5	3.6	3.9
80°	0.9	1.1	1.4	2.0	3.2	3.4
82.5°	0.9	1.1	1.1	1.6	2.5	2.7
85°	0.7	0.9	0.9	1.1	1.6	1.8
87.5°	0.7	0.9	0.7	0.5	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)