

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: P1339553

Luminaire Tested: P3A05R459840DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R459840DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

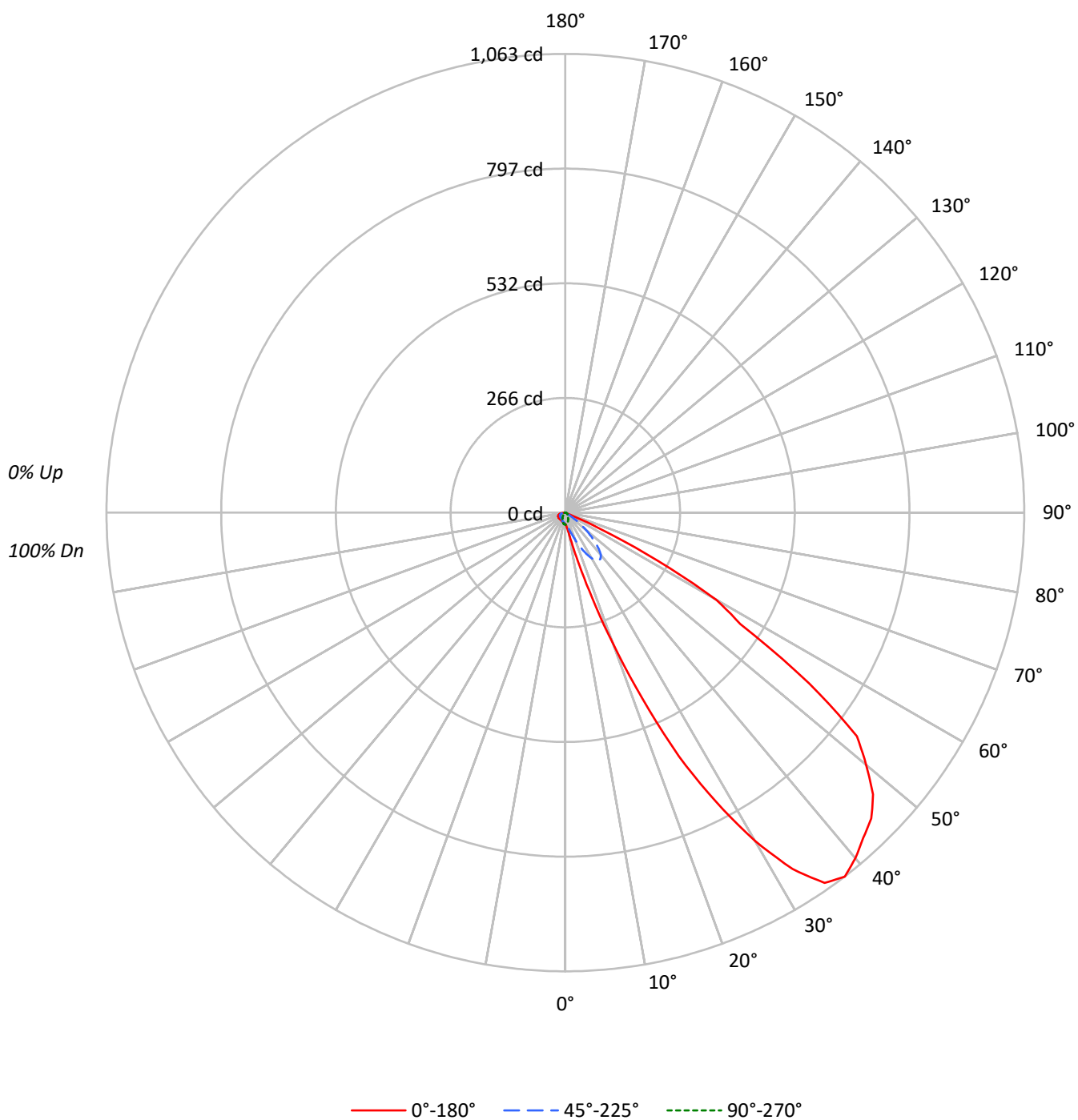
Lumens per Lamp: N/A
Luminaire Lumens: 475.0 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	35	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6030	6030	6030	6030	6030
5°	7176	6648	5965	5525	5525
10°	11445	7771	5589	5233	5233
15°	28513	10420	5085	4904	5085
20°	75093	15565	4387	4667	4947
25°	150807	23082	3799	4379	4839
30°	222313	30916	3089	4279	4963
35°	280408	36246	2623	4203	5140
40°	299189	36611	2347	4380	5496
45°	310854	30546	2202	4745	5954
50°	310369	21287	2149	5083	6686
55°	263790	9443	2256	5696	7340
60°	177310	1886	2237	6359	8420
65°	47061	830	2231	6901	9547
70°	1282	1026	2244	7565	10835
75°	1017	1017	2288	7964	12285
80°	1010	1515	2526	8461	13891
85°	1006	2013	4026	8806	13838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 318864 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.7	0.6
10°-20°	13.4	2.8
20°-30°	55.3	11.6
30°-40°	116.5	24.5
40°-50°	143.7	30.2
50°-60°	107.7	22.7
60°-70°	27.7	5.8
70°-80°	5.8	1.2
80°-90°	2.3	0.5
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°	71.4	15.0
0°-40°	187.8	39.5
0°-60°	439.2	92.5
0°-90°	475.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	475.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	28	28	28	28	28	
5°	33	30	27	25	25	4
15°	126	46	22	22	22	46
25°	623	95	16	18	20	290
35°	1048	135	10	16	19	638
45°	1002	98	7	15	19	767
55°	690	25	6	15	19	596
65°	91	2	4	13	18	131
75°	1	1	3	9	14	1
85°	0	1	2	4	6	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
2.5°	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.7	28.3	27.5	26.7
5°	32.6	32.2	32.2	32.2	31.8	31.4	31.4	30.2	28.7	27.1	25.9
7.5°	38.5	38.5	38.1	37.3	36.9	36.1	35.3	32.2	28.7	26.3	24.7
10°	51.4	50.6	49.5	48.7	46.7	44.0	42.0	34.9	28.3	25.1	23.9
12.5°	76.9	78.5	74.6	70.6	65.2	60.0	53.8	39.6	28.3	23.9	22.8
15°	125.6	128.3	120.9	113.0	99.7	87.1	75.4	45.9	27.5	22.4	21.2
17.5°	205.3	208.8	196.2	177.8	157.0	131.9	110.3	54.6	26.7	20.8	20.0
20°	321.8	321.4	297.1	274.0	233.9	197.0	156.6	66.7	25.5	18.8	18.8
22.5°	465.1	466.7	436.8	395.2	338.3	279.1	214.7	80.9	23.9	17.3	17.7
25°	623.3	609.9	574.6	524.0	451.4	369.3	284.5	95.4	22.4	15.7	16.5
27.5°	755.1	742.2	701.8	641.7	563.6	466.3	355.6	109.9	20.4	14.1	15.3
30°	878.0	861.5	812.8	744.9	651.9	546.7	422.3	122.1	18.1	12.2	14.1
32.5°	979.2	964.3	909.0	830.1	728.8	615.8	478.8	131.5	15.7	11.0	13.3
35°	1047.5	1032.2	981.2	894.5	784.2	666.0	524.7	135.4	13.7	9.8	13.0
37.5°	1063.2	1055.0	1018.5	937.2	822.2	698.2	554.2	134.2	11.4	9.0	12.2
40°	1045.2	1047.1	1029.9	962.4	842.7	712.0	566.4	127.9	9.4	8.2	11.8
42.5°	1022.0	1027.1	1025.9	972.6	851.3	712.7	561.2	115.4	7.5	7.5	11.4
45°	1002.4	1007.5	1014.6	968.3	845.4	702.5	545.2	98.5	5.5	7.1	11.4
47.5°	966.7	972.2	982.4	933.7	815.6	676.2	516.1	80.1	3.9	6.7	11.0
50°	909.8	912.5	909.8	855.2	758.3	633.9	469.0	62.4	2.7	6.3	11.0
52.5°	851.3	845.8	823.0	754.0	667.2	566.7	409.8	44.4	2.0	5.9	10.6
55°	690.0	681.3	664.5	622.1	572.6	484.3	331.3	24.7	2.0	5.9	10.2
57.5°	480.8	485.5	491.4	482.8	460.0	381.5	251.6	11.0	2.0	5.5	10.2
60°	404.3	400.3	400.7	395.2	357.6	278.3	173.1	4.3	2.0	5.1	9.8
62.5°	241.4	244.1	249.2	250.4	213.1	155.4	90.7	2.0	2.0	4.7	9.4
65°	90.7	95.0	83.2	72.2	57.3	42.0	21.2	1.6	2.4	4.3	8.6
67.5°	2.7	3.1	3.9	3.5	3.5	3.1	2.4	1.6	2.4	3.9	8.2
70°	2.0	2.0	2.0	2.0	2.0	1.6	1.6	1.6	2.0	3.5	7.5
72.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.0	3.1	6.7
75°	1.2	1.6	1.2	1.2	1.2	1.2	1.2	1.2	2.0	2.7	5.5
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6	2.4	4.7
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.6	2.0	3.9
82.5°	0.8	0.8	0.8	0.4	0.8	0.8	0.8	0.8	1.6	1.6	3.1
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.2	1.6	2.0
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.8	1.2	1.2	1.2
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):

	135°	157.5°	180°
0°	27.5	27.5	27.5
2.5°	25.9	25.9	25.9
5°	25.1	25.1	25.1
7.5°	24.3	24.3	24.3
10°	23.5	23.5	23.5
12.5°	22.8	22.8	23.2
15°	21.6	22.4	22.4
17.5°	20.8	21.6	22.0
20°	20.0	20.8	21.2
22.5°	18.8	20.0	20.8
25°	18.1	19.6	20.0
27.5°	17.3	19.2	20.0
30°	16.9	18.8	19.6
32.5°	16.1	18.4	19.2
35°	15.7	18.4	19.2
37.5°	15.7	18.1	19.2
40°	15.3	18.1	19.2
42.5°	15.3	18.1	19.2
45°	15.3	18.1	19.2
47.5°	14.9	18.1	19.6
50°	14.9	18.4	19.6
52.5°	14.9	18.4	19.6
55°	14.9	18.4	19.2
57.5°	14.5	18.1	19.2
60°	14.5	18.1	19.2
62.5°	13.7	17.7	18.8
65°	13.3	17.3	18.4
67.5°	12.6	16.9	17.7
70°	11.8	15.7	16.9
72.5°	10.6	14.9	16.1
75°	9.4	13.7	14.5
77.5°	8.2	12.2	13.0
80°	6.7	10.2	11.0
82.5°	5.1	7.8	8.2
85°	3.5	5.1	5.5
87.5°	1.6	2.4	2.7
90°	0.0	0.0	0.0

(END OF REPORT)