

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: P1339440

Luminaire Tested: P3A05R459727DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339440
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: P3A05R459727DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 97CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

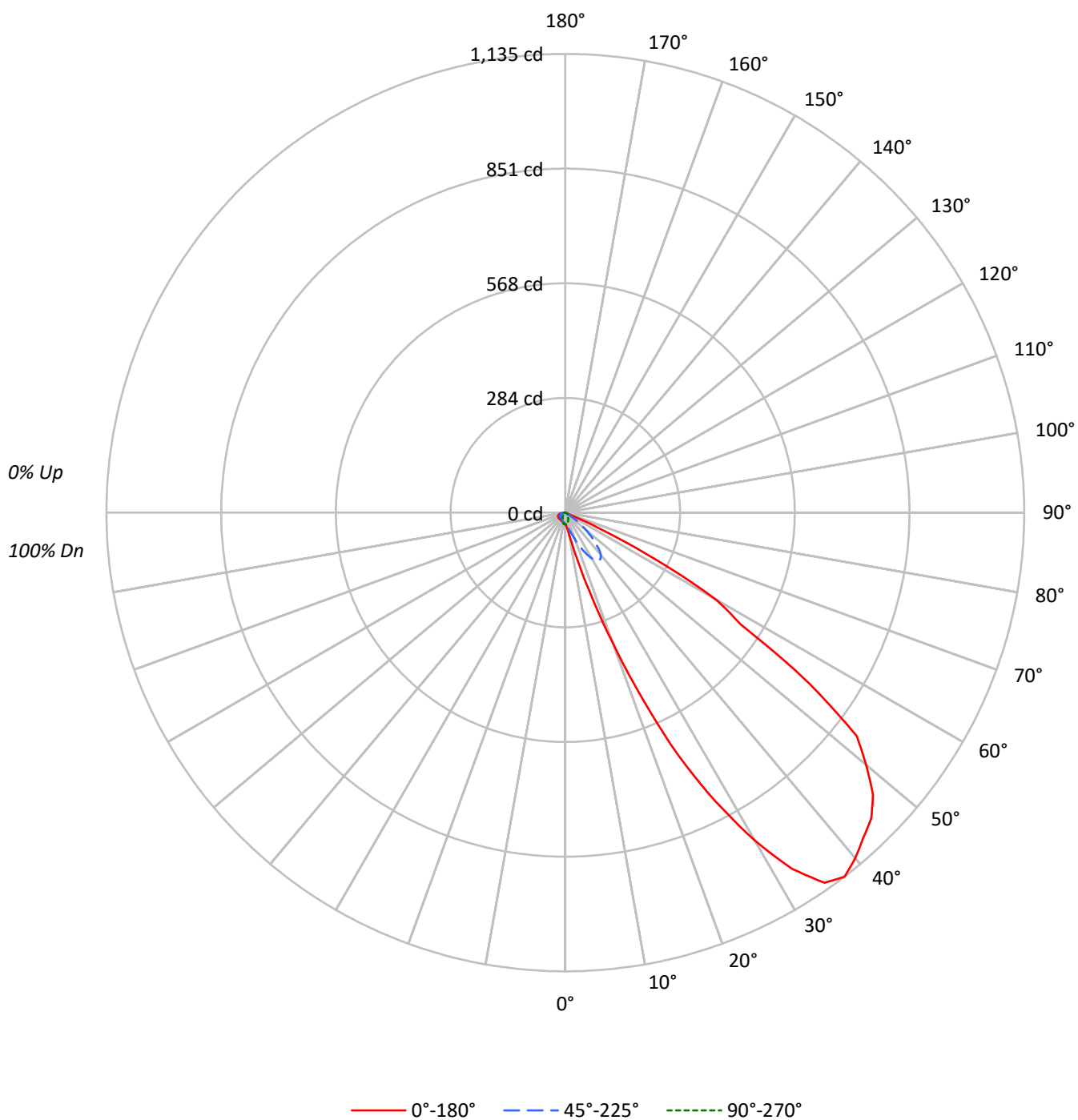
Lumens per Lamp: N/A
Luminaire Lumens: 507.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	36	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°	6425	6425	6425	6425	6425
5°	7660	7110	6361	5899	5899
10°	12224	8305	5967	5589	5589
15°	30443	11124	5426	5221	5426
20°	80157	16615	4690	4994	5274
25°	160945	24630	4065	4670	5178
30°	237277	32992	3292	4558	5292
35°	299307	38682	2811	4497	5488
40°	319341	39102	2519	4666	5868
45°	331786	32593	2326	5055	6357
50°	331281	22720	2286	5424	7130
55°	281567	10093	2409	6079	7837
60°	189239	2017	2368	6798	8991
65°	50226	882	2387	7368	10222
70°	1346	1090	2436	8078	11540
75°	1101	1101	2457	8557	13132
80°	1010	1642	2652	8966	14775
85°	1006	2013	4277	9561	14844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 340351 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.9	0.6
10°-20°	14.3	2.8
20°-30°	59.0	11.6
30°-40°	124.3	24.5
40°-50°	153.4	30.2
50°-60°	114.9	22.7
60°-70°	29.6	5.8
70°-80°	6.1	1.2
80°-90°	2.5	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°	76.2	15.0
0°-40°	200.5	39.5
0°-60°	468.8	92.5
0°-90°	507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	507.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	29	29	29	29	29	
5°	35	32	29	27	27	4
15°	134	49	24	23	24	49
25°	665	102	17	19	21	310
35°	1118	144	10	17	20	681
45°	1070	105	8	16	20	819
55°	736	26	6	16	20	636
65°	97	2	5	14	20	140
75°	1	1	3	10	16	2
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°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
2.5°	31.0	31.0	31.0	31.0	31.0	31.0	31.0	30.6	30.2	29.3	28.5
5°	34.8	34.4	34.4	34.4	33.9	33.5	33.5	32.3	30.6	28.9	27.6
7.5°	41.1	41.1	40.6	39.8	39.4	38.5	37.7	34.4	30.6	28.1	26.4
10°	54.9	54.0	52.8	51.9	49.9	46.9	44.8	37.3	30.2	26.8	25.6
12.5°	82.1	83.8	79.6	75.4	69.5	64.1	57.4	42.3	30.2	25.6	24.3
15°	134.1	137.0	129.0	120.6	106.4	93.0	80.4	49.0	29.3	23.9	22.6
17.5°	219.1	222.9	209.5	189.8	167.6	140.8	117.7	58.2	28.5	22.2	21.4
20°	343.5	343.1	317.1	292.4	249.7	210.3	167.1	71.2	27.2	20.1	20.1
22.5°	496.4	498.1	466.3	421.9	361.1	297.9	229.2	86.3	25.6	18.4	18.9
25°	665.2	651.0	613.3	559.3	481.8	394.2	303.7	101.8	23.9	16.8	17.6
27.5°	806.0	792.2	749.0	684.9	601.6	497.7	379.5	117.3	21.8	15.1	16.3
30°	937.1	919.5	867.6	795.1	695.8	583.6	450.8	130.3	19.3	13.0	15.1
32.5°	1045.2	1029.3	970.2	886.0	777.9	657.3	511.1	140.3	16.8	11.7	14.2
35°	1118.1	1101.8	1047.3	954.7	837.0	710.9	560.1	144.5	14.7	10.5	13.8
37.5°	1134.9	1126.1	1087.1	1000.4	877.6	745.3	591.5	143.3	12.1	9.6	13.0
40°	1115.6	1117.7	1099.3	1027.2	899.4	759.9	604.5	136.6	10.1	8.8	12.6
42.5°	1090.9	1096.3	1095.1	1038.1	908.6	760.8	599.1	123.2	8.0	8.0	12.1
45°	1069.9	1075.4	1082.9	1033.5	902.4	749.9	581.9	105.1	5.9	7.5	12.1
47.5°	1031.8	1037.7	1048.6	996.6	870.5	721.8	550.9	85.5	4.2	7.1	11.7
50°	971.1	974.0	971.1	912.8	809.4	676.6	500.6	66.6	2.9	6.7	11.7
52.5°	908.6	902.8	878.5	804.7	712.2	604.9	437.4	47.3	2.1	6.3	11.3
55°	736.5	727.2	709.2	664.0	611.2	516.9	353.6	26.4	2.1	6.3	10.9
57.5°	513.2	518.2	524.5	515.3	491.0	407.2	268.5	11.7	2.1	5.9	10.9
60°	431.5	427.3	427.7	421.9	381.6	297.0	184.7	4.6	2.1	5.4	10.5
62.5°	257.6	260.6	266.0	267.3	227.5	165.9	96.8	2.1	2.1	5.0	10.1
65°	96.8	101.4	88.8	77.1	61.2	44.8	22.6	1.7	2.5	4.6	9.2
67.5°	2.9	3.4	4.2	3.8	3.8	3.4	2.5	1.7	2.5	4.2	8.8
70°	2.1	2.1	2.1	2.1	2.1	1.7	1.7	1.7	2.1	3.8	8.0
72.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.1	3.4	7.1
75°	1.3	1.7	1.3	1.3	1.3	1.3	1.3	1.3	2.1	2.9	5.9
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	2.5	5.0
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.7	2.1	4.2
82.5°	0.8	0.8	0.8	0.4	0.8	0.8	0.8	0.8	1.7	1.7	3.4
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.3	1.7	2.1
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.8	1.3	1.3	1.3
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°	29.3	29.3	29.3
2.5°	27.6	27.6	27.6
5°	26.8	26.8	26.8
7.5°	26.0	26.0	26.0
10°	25.1	25.1	25.1
12.5°	24.3	24.3	24.7
15°	23.0	23.9	23.9
17.5°	22.2	23.0	23.5
20°	21.4	22.2	22.6
22.5°	20.1	21.4	22.2
25°	19.3	20.9	21.4
27.5°	18.4	20.5	21.4
30°	18.0	20.1	20.9
32.5°	17.2	19.7	20.5
35°	16.8	19.7	20.5
37.5°	16.8	19.3	20.5
40°	16.3	19.3	20.5
42.5°	16.3	19.3	20.5
45°	16.3	19.3	20.5
47.5°	15.9	19.3	20.9
50°	15.9	19.7	20.9
52.5°	15.9	19.7	20.9
55°	15.9	19.7	20.5
57.5°	15.5	19.3	20.5
60°	15.5	19.3	20.5
62.5°	14.7	18.9	20.1
65°	14.2	18.4	19.7
67.5°	13.4	18.0	18.9
70°	12.6	16.8	18.0
72.5°	11.3	15.9	17.2
75°	10.1	14.7	15.5
77.5°	8.8	13.0	13.8
80°	7.1	10.9	11.7
82.5°	5.4	8.4	8.8
85°	3.8	5.4	5.9
87.5°	1.7	2.5	2.9
90°	0.0	0.0	0.0

(END OF REPORT)