

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: P1339505

Luminaire Tested: P3A05R459827DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339505
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: P3A05R459827DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 98CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

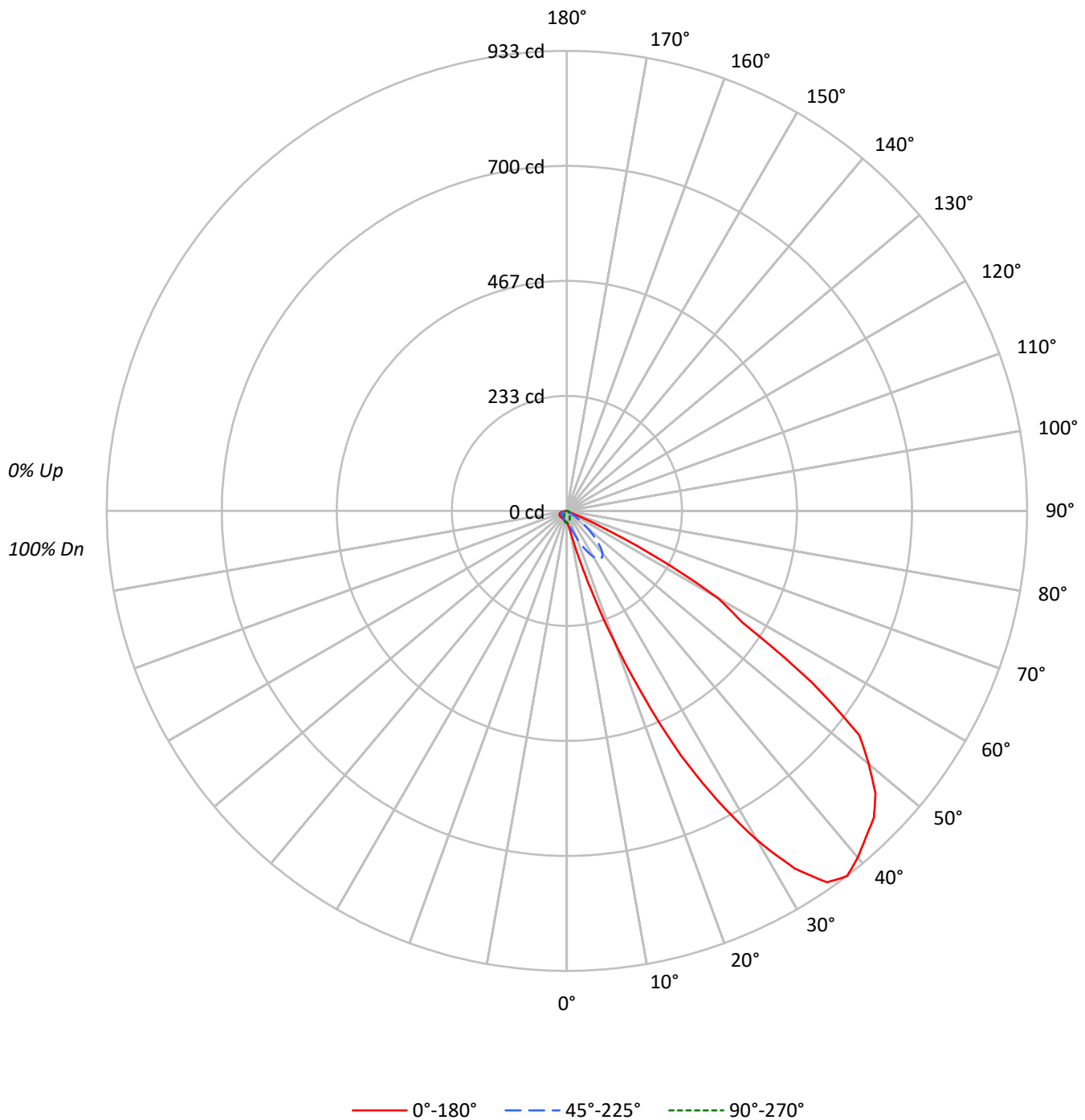
Lumens per Lamp: N/A
Luminaire Lumens: 417.0 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	5285	5285	5285	5285	5285
5°	6295	5833	5239	4865	4865
10°	10042	6836	4921	4609	4609
15°	25040	9149	4450	4313	4450
20°	65922	13675	3850	4107	4340
25°	132395	20251	3339	3823	4258
30°	195169	27143	2709	3747	4355
35°	246170	31829	2302	3694	4524
40°	262664	32146	2061	3836	4838
45°	272897	26824	1923	4155	5241
50°	272469	18694	1876	4469	5868
55°	231562	8296	1988	5008	6461
60°	155645	1667	1974	5570	7412
65°	41301	726	1972	6071	8406
70°	1090	898	1988	6604	9489
75°	847	847	2033	7032	10760
80°	884	1263	2147	7450	12123
85°	755	1761	3522	7799	12077

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 279915 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.6
10°-20°	11.8	2.8
20°-30°	48.5	11.6
30°-40°	102.2	24.5
40°-50°	126.1	30.2
50°-60°	94.5	22.7
60°-70°	24.3	5.8
70°-80°	5.0	1.2
80°-90°	2.0	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°	62.7	15.0
0°-40°	164.9	39.5
0°-60°	385.6	92.5
0°-90°	417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	417.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	24	24	24	24	24	
5°	29	26	24	22	22	3
15°	110	40	20	19	20	40
25°	547	84	14	16	18	255
35°	920	119	9	14	17	560
45°	880	86	6	13	17	673
55°	606	22	5	13	17	523
65°	80	1	4	12	16	115
75°	1	1	2	8	13	1
85°	0	1	1	3	5	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°	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
2.5°	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.2	24.8	24.1	23.4
5°	28.6	28.3	28.3	28.3	27.9	27.6	27.6	26.5	25.2	23.8	22.7
7.5°	33.8	33.8	33.4	32.7	32.4	31.7	31.0	28.3	25.2	23.1	21.7
10°	45.1	44.4	43.4	42.7	41.0	38.6	36.9	30.7	24.8	22.1	21.0
12.5°	67.5	68.9	65.5	62.0	57.2	52.7	47.2	34.8	24.8	21.0	20.0
15°	110.3	112.7	106.1	99.2	87.5	76.5	66.2	40.3	24.1	19.6	18.6
17.5°	180.2	183.3	172.3	156.1	137.8	115.8	96.8	47.9	23.4	18.3	17.6
20°	282.5	282.2	260.8	240.5	205.4	173.0	137.5	58.6	22.4	16.5	16.5
22.5°	408.3	409.7	383.5	347.0	297.0	245.0	188.5	71.0	21.0	15.2	15.5
25°	547.2	535.4	504.4	460.0	396.2	324.2	249.8	83.7	19.6	13.8	14.5
27.5°	662.9	651.6	616.1	563.4	494.8	409.3	312.2	96.5	17.9	12.4	13.4
30°	770.8	756.3	713.6	654.0	572.3	480.0	370.7	107.2	15.8	10.7	12.4
32.5°	859.7	846.6	798.0	728.7	639.8	540.6	420.4	115.4	13.8	9.6	11.7
35°	919.6	906.2	861.4	785.2	688.4	584.7	460.7	118.9	12.1	8.6	11.4
37.5°	933.4	926.2	894.1	822.8	721.8	613.0	486.5	117.8	10.0	7.9	10.7
40°	917.6	919.3	904.1	844.9	739.8	625.0	497.2	112.3	8.3	7.2	10.3
42.5°	897.2	901.7	900.7	853.8	747.3	625.7	492.7	101.3	6.5	6.5	10.0
45°	880.0	884.5	890.7	850.0	742.2	616.8	478.6	86.5	4.8	6.2	10.0
47.5°	848.6	853.5	862.4	819.7	716.0	593.7	453.1	70.3	3.4	5.9	9.6
50°	798.7	801.1	798.7	750.8	665.7	556.5	411.7	54.8	2.4	5.5	9.6
52.5°	747.3	742.5	722.5	661.9	585.7	497.5	359.7	38.9	1.7	5.2	9.3
55°	605.7	598.2	583.3	546.1	502.7	425.2	290.8	21.7	1.7	5.2	9.0
57.5°	422.1	426.2	431.4	423.8	403.8	334.9	220.9	9.6	1.7	4.8	9.0
60°	354.9	351.4	351.8	347.0	313.9	244.3	151.9	3.8	1.7	4.5	8.6
62.5°	211.9	214.3	218.8	219.8	187.1	136.4	79.6	1.7	1.7	4.1	8.3
65°	79.6	83.4	73.0	63.4	50.3	36.9	18.6	1.4	2.1	3.8	7.6
67.5°	2.4	2.8	3.4	3.1	3.1	2.8	2.1	1.4	2.1	3.4	7.2
70°	1.7	1.7	1.7	1.7	1.7	1.4	1.4	1.4	1.7	3.1	6.5
72.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	2.8	5.9
75°	1.0	1.4	1.0	1.0	1.0	1.0	1.0	1.0	1.7	2.4	4.8
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.4	2.1	4.1
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.4	1.7	3.4
82.5°	0.7	0.7	0.7	0.3	0.7	0.7	0.7	0.7	1.4	1.4	2.8
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.0	1.4	1.7
87.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.7	1.0	1.0	1.0
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°	24.1	24.1	24.1
2.5°	22.7	22.7	22.7
5°	22.1	22.1	22.1
7.5°	21.4	21.4	21.4
10°	20.7	20.7	20.7
12.5°	20.0	20.0	20.3
15°	19.0	19.6	19.6
17.5°	18.3	19.0	19.3
20°	17.6	18.3	18.6
22.5°	16.5	17.6	18.3
25°	15.8	17.2	17.6
27.5°	15.2	16.9	17.6
30°	14.8	16.5	17.2
32.5°	14.1	16.2	16.9
35°	13.8	16.2	16.9
37.5°	13.8	15.8	16.9
40°	13.4	15.8	16.9
42.5°	13.4	15.8	16.9
45°	13.4	15.8	16.9
47.5°	13.1	15.8	17.2
50°	13.1	16.2	17.2
52.5°	13.1	16.2	17.2
55°	13.1	16.2	16.9
57.5°	12.7	15.8	16.9
60°	12.7	15.8	16.9
62.5°	12.1	15.5	16.5
65°	11.7	15.2	16.2
67.5°	11.0	14.8	15.5
70°	10.3	13.8	14.8
72.5°	9.3	13.1	14.1
75°	8.3	12.1	12.7
77.5°	7.2	10.7	11.4
80°	5.9	9.0	9.6
82.5°	4.5	6.9	7.2
85°	3.1	4.5	4.8
87.5°	1.4	2.1	2.4
90°	0.0	0.0	0.0

(END OF REPORT)