

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: P1339522

Luminaire Tested: P3A05R459830DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339522
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: P3A05R459830DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

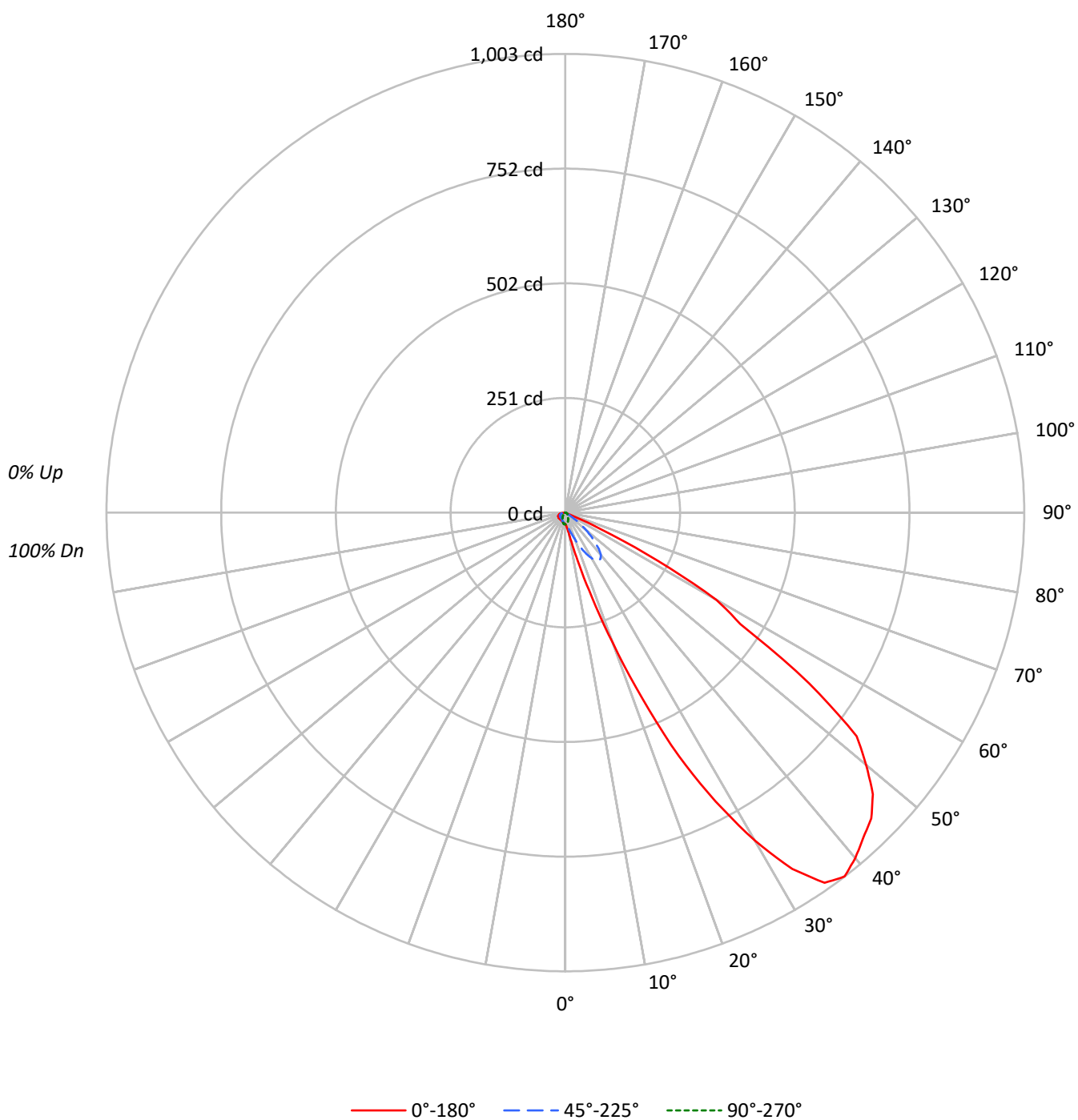
Lumens per Lamp: N/A
Luminaire Lumens: 448.0 lumens
Efficiency: N/A
Efficacy: 62.2 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	5679	5679	5679	5679	5679
5°	6758	6273	5613	5217	5217
10°	10799	7326	5277	4943	4943
15°	26901	9830	4790	4631	4790
20°	70823	14678	4154	4410	4667
25°	142218	21775	3581	4113	4573
30°	209678	29144	2912	4026	4684
35°	264480	34184	2490	3962	4845
40°	282186	34550	2233	4122	5181
45°	293178	28809	2078	4466	5613
50°	292732	20093	2013	4810	6311
55°	248804	8908	2141	5390	6920
60°	167223	1798	2105	6008	7938
65°	44363	778	2127	6538	9028
70°	1218	962	2116	7117	10194
75°	932	932	2203	7540	11607
80°	884	1389	2399	7956	13133
85°	1006	1761	3774	8303	13083

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 300720 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.6
10°-20°	12.6	2.8
20°-30°	52.1	11.6
30°-40°	109.8	24.5
40°-50°	135.5	30.2
50°-60°	101.6	22.7
60°-70°	26.1	5.8
70°-80°	5.4	1.2
80°-90°	2.2	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°	67.3	15.0
0°-40°	177.2	39.5
0°-60°	414.3	92.5
0°-90°	448.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	448.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	26	26	26	26	26	
5°	31	28	26	24	24	3
15°	118	43	21	20	21	43
25°	588	90	15	17	19	274
35°	988	128	9	15	18	602
45°	945	93	7	14	18	723
55°	651	23	6	14	18	562
65°	86	2	4	13	17	123
75°	1	1	3	9	14	1
85°	0	1	2	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°	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
2.5°	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.0	26.7	25.9	25.2
5°	30.7	30.4	30.4	30.4	30.0	29.6	29.6	28.5	27.0	25.5	24.4
7.5°	36.3	36.3	35.9	35.2	34.8	34.1	33.3	30.4	27.0	24.8	23.3
10°	48.5	47.8	46.6	45.9	44.1	41.5	39.6	32.9	26.7	23.7	22.6
12.5°	72.6	74.0	70.3	66.6	61.4	56.6	50.7	37.4	26.7	22.6	21.5
15°	118.5	121.0	114.0	106.6	94.0	82.2	71.1	43.3	25.9	21.1	20.0
17.5°	193.6	196.9	185.1	167.7	148.1	124.4	104.0	51.5	25.2	19.6	18.9
20°	303.5	303.2	280.2	258.4	220.6	185.8	147.7	62.9	24.1	17.8	17.8
22.5°	438.7	440.1	412.0	372.8	319.1	263.2	202.5	76.3	22.6	16.3	16.7
25°	587.8	575.2	541.9	494.2	425.7	348.3	268.4	90.0	21.1	14.8	15.5
27.5°	712.2	700.0	661.9	605.2	531.6	439.8	335.4	103.6	19.2	13.3	14.4
30°	828.1	812.5	766.6	702.6	614.9	515.6	398.3	115.1	17.0	11.5	13.3
32.5°	923.6	909.5	857.3	782.9	687.4	580.8	451.6	124.0	14.8	10.4	12.6
35°	988.0	973.6	925.4	843.6	739.6	628.2	494.9	127.7	13.0	9.3	12.2
37.5°	1002.8	995.0	960.6	884.0	775.5	658.5	522.7	126.6	10.7	8.5	11.5
40°	985.8	987.6	971.3	907.7	794.8	671.5	534.2	120.7	8.9	7.8	11.1
42.5°	963.9	968.7	967.6	917.3	802.9	672.2	529.3	108.8	7.0	7.0	10.7
45°	945.4	950.2	956.9	913.2	797.3	662.6	514.2	92.9	5.2	6.7	10.7
47.5°	911.7	916.9	926.5	880.6	769.2	637.8	486.8	75.5	3.7	6.3	10.4
50°	858.1	860.6	858.1	806.6	715.2	597.8	442.4	58.9	2.6	5.9	10.4
52.5°	802.9	797.7	776.2	711.1	629.3	534.5	386.5	41.8	1.9	5.6	10.0
55°	650.8	642.6	626.7	586.7	540.1	456.8	312.4	23.3	1.9	5.6	9.6
57.5°	453.5	457.9	463.5	455.3	433.8	359.8	237.3	10.4	1.9	5.2	9.6
60°	381.3	377.6	377.9	372.8	337.2	262.5	163.2	4.1	1.9	4.8	9.3
62.5°	227.7	230.2	235.1	236.2	201.0	146.6	85.5	1.9	1.9	4.4	8.9
65°	85.5	89.6	78.5	68.1	54.0	39.6	20.0	1.5	2.2	4.1	8.1
67.5°	2.6	3.0	3.7	3.3	3.3	3.0	2.2	1.5	2.2	3.7	7.8
70°	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5	1.9	3.3	7.0
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.9	3.0	6.3
75°	1.1	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.9	2.6	5.2
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.5	2.2	4.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1	1.5	1.9	3.7
82.5°	0.7	0.7	0.7	0.4	0.7	0.7	0.7	0.7	1.5	1.5	3.0
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.1	1.5	1.9
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.7	1.1	1.1	1.1
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°	25.9	25.9	25.9
2.5°	24.4	24.4	24.4
5°	23.7	23.7	23.7
7.5°	23.0	23.0	23.0
10°	22.2	22.2	22.2
12.5°	21.5	21.5	21.8
15°	20.4	21.1	21.1
17.5°	19.6	20.4	20.7
20°	18.9	19.6	20.0
22.5°	17.8	18.9	19.6
25°	17.0	18.5	18.9
27.5°	16.3	18.1	18.9
30°	15.9	17.8	18.5
32.5°	15.2	17.4	18.1
35°	14.8	17.4	18.1
37.5°	14.8	17.0	18.1
40°	14.4	17.0	18.1
42.5°	14.4	17.0	18.1
45°	14.4	17.0	18.1
47.5°	14.1	17.0	18.5
50°	14.1	17.4	18.5
52.5°	14.1	17.4	18.5
55°	14.1	17.4	18.1
57.5°	13.7	17.0	18.1
60°	13.7	17.0	18.1
62.5°	13.0	16.7	17.8
65°	12.6	16.3	17.4
67.5°	11.8	15.9	16.7
70°	11.1	14.8	15.9
72.5°	10.0	14.1	15.2
75°	8.9	13.0	13.7
77.5°	7.8	11.5	12.2
80°	6.3	9.6	10.4
82.5°	4.8	7.4	7.8
85°	3.3	4.8	5.2
87.5°	1.5	2.2	2.6
90°	0.0	0.0	0.0

(END OF REPORT)