

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: P1339456

Luminaire Tested: P3A05R459730DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1339456
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: P3A05R459730DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 97CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

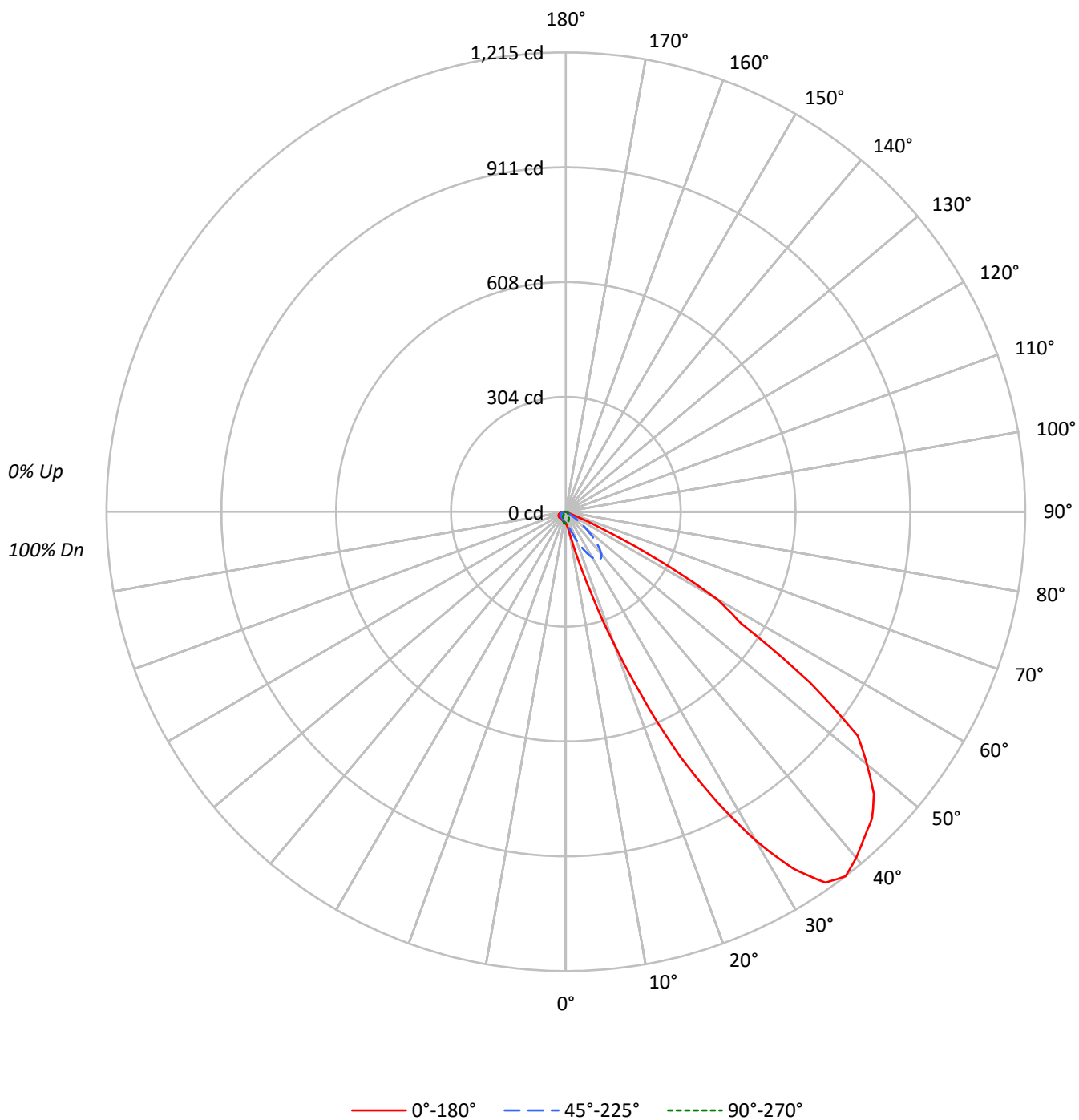
Lumens per Lamp: N/A
Luminaire Lumens: 542.9 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	6885	6885	6885	6885	6885
5°	8188	7594	6824	6317	6317
10°	13093	8884	6390	5990	5990
15°	32600	11918	5812	5607	5812
20°	85851	17805	5017	5344	5647
25°	172389	26372	4331	4984	5541
30°	254140	35322	3520	4887	5672
35°	320562	41439	2998	4792	5889
40°	342012	41878	2691	5009	6298
45°	355355	34918	2512	5427	6822
50°	354786	24323	2456	5799	7642
55°	301562	10819	2561	6499	8411
60°	202659	2149	2544	7280	9648
65°	53754	934	2542	7939	10948
70°	1410	1154	2565	8655	12374
75°	1101	1101	2626	9150	14064
80°	1137	1642	2778	9597	15911
85°	1006	2264	4529	10064	15851

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 364499 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.1	0.6
10°-20°	15.3	2.8
20°-30°	63.2	11.6
30°-40°	133.1	24.5
40°-50°	164.2	30.2
50°-60°	123.1	22.7
60°-70°	31.7	5.8
70°-80°	6.5	1.2
80°-90°	2.7	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°	81.6	15.0
0°-40°	214.7	39.5
0°-60°	502.1	92.5
0°-90°	542.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	542.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	31	31	31	31	31	
5°	37	34	31	29	29	4
15°	144	52	26	25	26	53
25°	712	109	18	21	23	332
35°	1198	155	11	18	22	730
45°	1146	113	8	18	22	877
55°	789	28	7	17	22	681
65°	104	2	5	15	21	149
75°	1	1	3	11	17	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°	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4
2.5°	33.2	33.2	33.2	33.2	33.2	33.2	33.2	32.8	32.3	31.4	30.5
5°	37.2	36.8	36.8	36.8	36.3	35.9	35.9	34.5	32.8	31.0	29.6
7.5°	44.0	44.0	43.5	42.6	42.2	41.3	40.4	36.8	32.8	30.1	28.3
10°	58.8	57.9	56.5	55.6	53.4	50.3	48.0	39.9	32.3	28.7	27.4
12.5°	87.9	89.7	85.2	80.8	74.5	68.6	61.5	45.3	32.3	27.4	26.0
15°	143.6	146.7	138.2	129.2	114.0	99.6	86.1	52.5	31.4	25.6	24.2
17.5°	234.7	238.7	224.3	203.2	179.5	150.8	126.1	62.4	30.5	23.8	22.9
20°	367.9	367.5	339.6	313.2	267.4	225.2	179.0	76.3	29.2	21.5	21.5
22.5°	531.7	533.5	499.4	451.8	386.8	319.0	245.4	92.4	27.4	19.7	20.2
25°	712.5	697.2	656.8	599.0	516.0	422.2	325.3	109.0	25.6	17.9	18.8
27.5°	863.2	848.4	802.2	733.6	644.3	533.0	406.5	125.6	23.3	16.2	17.5
30°	1003.7	984.8	929.2	851.6	745.2	625.0	482.8	139.5	20.6	13.9	16.2
32.5°	1119.4	1102.4	1039.1	948.9	833.2	704.0	547.4	150.3	17.9	12.6	15.3
35°	1197.5	1180.0	1121.7	1022.5	896.4	761.4	599.9	154.8	15.7	11.2	14.8
37.5°	1215.4	1206.0	1164.3	1071.4	940.0	798.2	633.5	153.4	13.0	10.3	13.9
40°	1194.8	1197.0	1177.3	1100.1	963.3	813.9	647.4	146.3	10.8	9.4	13.5
42.5°	1168.3	1174.2	1172.8	1111.8	973.2	814.8	641.6	131.9	8.5	8.5	13.0
45°	1145.9	1151.7	1159.8	1106.9	966.4	803.1	623.2	112.6	6.3	8.1	13.0
47.5°	1105.1	1111.4	1123.0	1067.4	932.3	773.1	590.0	91.5	4.5	7.6	12.6
50°	1040.0	1043.2	1040.0	977.6	866.8	724.6	536.2	71.3	3.1	7.2	12.6
52.5°	973.2	966.9	940.9	861.9	762.7	647.9	468.4	50.7	2.2	6.7	12.1
55°	788.8	778.9	759.6	711.1	654.6	553.7	378.7	28.3	2.2	6.7	11.7
57.5°	549.6	555.0	561.7	551.9	525.8	436.1	287.6	12.6	2.2	6.3	11.7
60°	462.1	457.6	458.1	451.8	408.7	318.1	197.9	4.9	2.2	5.8	11.2
62.5°	275.9	279.1	284.9	286.3	243.6	177.7	103.6	2.2	2.2	5.4	10.8
65°	103.6	108.6	95.1	82.6	65.5	48.0	24.2	1.8	2.7	4.9	9.9
67.5°	3.1	3.6	4.5	4.0	4.0	3.6	2.7	1.8	2.7	4.5	9.4
70°	2.2	2.2	2.2	2.2	2.2	1.8	1.8	1.8	2.2	4.0	8.5
72.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.2	3.6	7.6
75°	1.3	1.8	1.3	1.3	1.3	1.3	1.3	1.3	2.2	3.1	6.3
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.8	2.7	5.4
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.8	2.2	4.5
82.5°	0.9	0.9	0.9	0.4	0.9	0.9	0.9	0.9	1.8	1.8	3.6
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	1.3	1.8	2.2
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.9	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°	31.4	31.4	31.4
2.5°	29.6	29.6	29.6
5°	28.7	28.7	28.7
7.5°	27.8	27.8	27.8
10°	26.9	26.9	26.9
12.5°	26.0	26.0	26.5
15°	24.7	25.6	25.6
17.5°	23.8	24.7	25.1
20°	22.9	23.8	24.2
22.5°	21.5	22.9	23.8
25°	20.6	22.4	22.9
27.5°	19.7	22.0	22.9
30°	19.3	21.5	22.4
32.5°	18.4	21.1	22.0
35°	17.9	21.1	22.0
37.5°	17.9	20.6	22.0
40°	17.5	20.6	22.0
42.5°	17.5	20.6	22.0
45°	17.5	20.6	22.0
47.5°	17.0	20.6	22.4
50°	17.0	21.1	22.4
52.5°	17.0	21.1	22.4
55°	17.0	21.1	22.0
57.5°	16.6	20.6	22.0
60°	16.6	20.6	22.0
62.5°	15.7	20.2	21.5
65°	15.3	19.7	21.1
67.5°	14.4	19.3	20.2
70°	13.5	17.9	19.3
72.5°	12.1	17.0	18.4
75°	10.8	15.7	16.6
77.5°	9.4	13.9	14.8
80°	7.6	11.7	12.6
82.5°	5.8	9.0	9.4
85°	4.0	5.8	6.3
87.5°	1.8	2.7	3.1
90°	0.0	0.0	0.0

(END OF REPORT)