

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: P1335958

Luminaire Tested: P3A02R459024DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335958
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: P3A02R459024DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R45 optic, 2400K CCT AND, 90CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

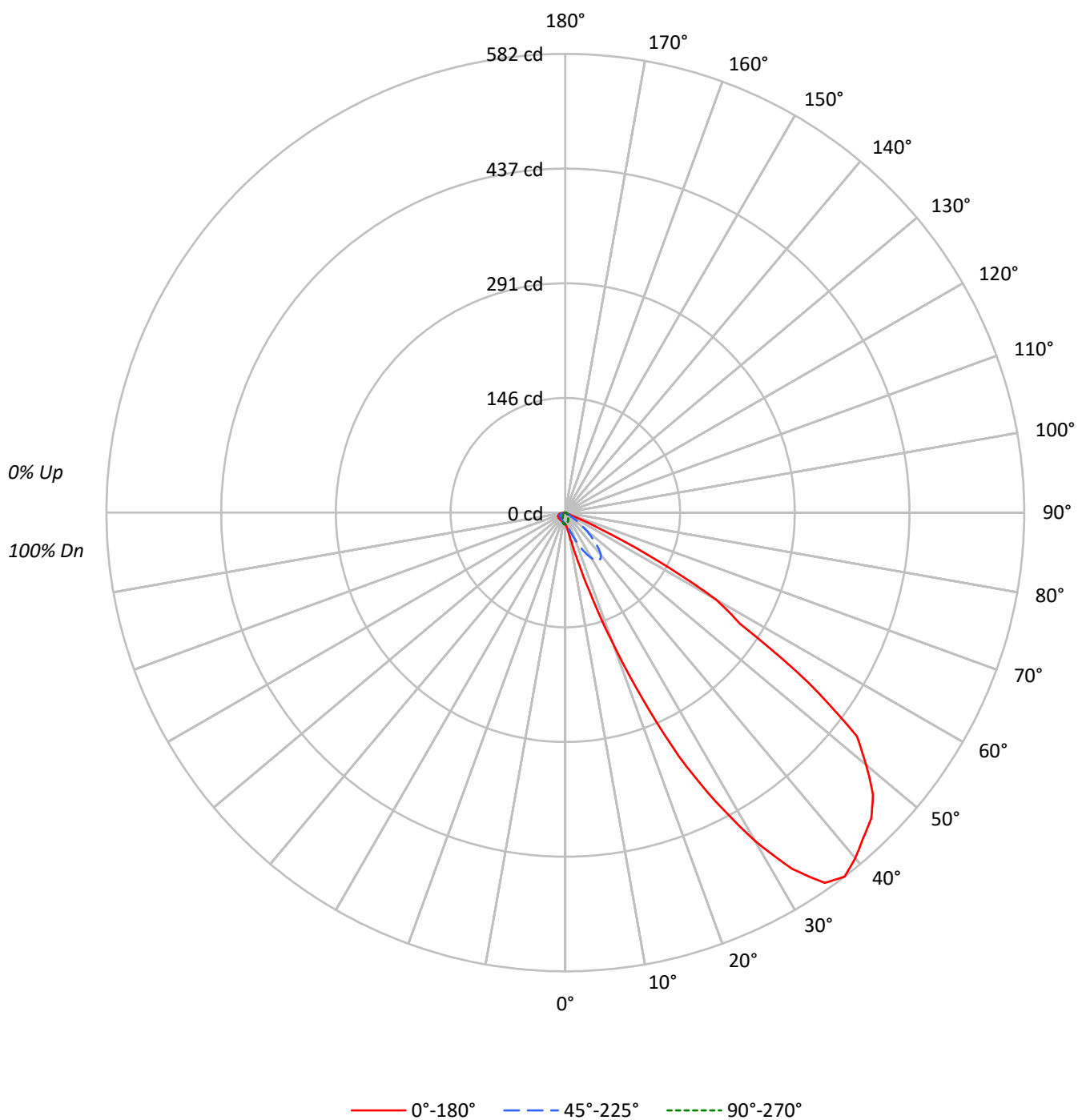
Lumens per Lamp: N/A
Luminaire Lumens: 260.0 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.83 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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

TEST NUMBER: P1335958

CATALOG NUMBER: P3A02R459024DE010 E3CA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1335958

CATALOG NUMBER: P3A02R459024DE010 E3CA451MB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94		96	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39	33	28	26
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35	29	24	22
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3289	3289	3289	3289	3289
5°	3918	3632	3258	3016	3016
10°	6257	4253	3050	2872	2872
15°	15596	5698	2770	2679	2770
20°	41117	8517	2404	2567	2707
25°	82553	12630	2081	2395	2661
30°	121690	16914	1696	2329	2709
35°	153495	19836	1446	2302	2811
40°	163764	20038	1288	2405	3006
45°	170157	16715	1209	2605	3256
50°	169888	11667	1160	2797	3650
55°	144396	5161	1223	3135	4014
60°	97054	1053	1228	3465	4605
65°	25736	467	1245	3788	5241
70°	705	577	1218	4103	5898
75°	508	508	1271	4406	6693
80°	505	758	1389	4672	7577
85°	503	1006	2264	4780	7548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 174525 cd/sqm

TEST NUMBER: P1335958

CATALOG NUMBER: P3A02R459024DE010 E3CA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.5	0.6
10°-20°	7.3	2.8
20°-30°	30.2	11.6
30°-40°	63.7	24.5
40°-50°	78.6	30.2
50°-60°	58.9	22.7
60°-70°	15.2	5.8
70°-80°	3.1	1.2
80°-90°	1.3	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°	39.1	15.0
0°-40°	102.8	39.5
0°-60°	240.4	92.5
0°-90°	260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	260.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	18	16	15	14	14	2
15°	69	25	12	12	12	25
25°	341	52	9	10	11	159
35°	573	74	5	9	10	349
45°	549	54	4	8	10	420
55°	378	14	3	8	10	326
65°	50	1	2	7	10	72
75°	1	1	2	5	8	1
85°	0	0	1	2	3	0
90°	0	0	0	0	0	

TEST NUMBER: P1335958

CATALOG NUMBER: P3A02R459024DE010 E3CA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
2.5°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.7	15.5	15.0	14.6
5°	17.8	17.6	17.6	17.6	17.4	17.2	17.2	16.5	15.7	14.8	14.2
7.5°	21.1	21.1	20.8	20.4	20.2	19.8	19.3	17.6	15.7	14.4	13.5
10°	28.1	27.7	27.1	26.6	25.6	24.1	23.0	19.1	15.5	13.7	13.1
12.5°	42.1	43.0	40.8	38.7	35.7	32.9	29.4	21.7	15.5	13.1	12.5
15°	68.7	70.2	66.2	61.9	54.6	47.7	41.2	25.1	15.0	12.2	11.6
17.5°	112.4	114.3	107.4	97.3	85.9	72.2	60.4	29.9	14.6	11.4	11.0
20°	176.2	175.9	162.6	150.0	128.0	107.8	85.7	36.5	14.0	10.3	10.3
22.5°	254.6	255.4	239.1	216.3	185.2	152.7	117.5	44.3	13.1	9.5	9.7
25°	341.2	333.8	314.5	286.8	247.1	202.2	155.8	52.2	12.2	8.6	9.0
27.5°	413.3	406.2	384.1	351.2	308.5	255.2	194.6	60.2	11.2	7.7	8.4
30°	480.6	471.6	444.9	407.8	356.8	299.3	231.2	66.8	9.9	6.7	7.7
32.5°	536.0	527.8	497.6	454.4	398.9	337.1	262.1	72.0	8.6	6.0	7.3
35°	573.4	565.0	537.1	489.6	429.2	364.6	287.2	74.1	7.5	5.4	7.1
37.5°	582.0	577.5	557.5	513.0	450.1	382.2	303.3	73.5	6.2	4.9	6.7
40°	572.1	573.2	563.7	526.8	461.2	389.7	310.0	70.0	5.2	4.5	6.4
42.5°	559.4	562.2	561.6	532.4	466.0	390.1	307.2	63.2	4.1	4.1	6.2
45°	548.7	551.5	555.3	530.0	462.7	384.5	298.4	53.9	3.0	3.9	6.2
47.5°	529.1	532.1	537.7	511.1	446.4	370.2	282.5	43.8	2.1	3.7	6.0
50°	498.0	499.5	498.0	468.1	415.1	347.0	256.7	34.2	1.5	3.4	6.0
52.5°	466.0	463.0	450.5	412.7	365.2	310.2	224.3	24.3	1.1	3.2	5.8
55°	377.7	372.9	363.7	340.5	313.4	265.1	181.3	13.5	1.1	3.2	5.6
57.5°	263.2	265.7	269.0	264.2	251.8	208.8	137.7	6.0	1.1	3.0	5.6
60°	221.3	219.1	219.3	216.3	195.7	152.3	94.7	2.4	1.1	2.8	5.4
62.5°	132.1	133.6	136.4	137.1	116.7	85.1	49.6	1.1	1.1	2.6	5.2
65°	49.6	52.0	45.5	39.5	31.4	23.0	11.6	0.9	1.3	2.4	4.7
67.5°	1.5	1.7	2.1	1.9	1.9	1.7	1.3	0.9	1.3	2.1	4.5
70°	1.1	1.1	1.1	1.1	1.1	0.9	0.9	0.9	1.1	1.9	4.1
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.7	3.7
75°	0.6	0.9	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.5	3.0
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.9	1.3	2.6
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.9	1.1	2.1
82.5°	0.4	0.4	0.4	0.2	0.4	0.4	0.4	0.4	0.9	0.9	1.7
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.9	1.1
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1335958

CATALOG NUMBER: P3A02R459024DE010 E3CA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	15.0	15.0	15.0
2.5°	14.2	14.2	14.2
5°	13.7	13.7	13.7
7.5°	13.3	13.3	13.3
10°	12.9	12.9	12.9
12.5°	12.5	12.5	12.7
15°	11.8	12.2	12.2
17.5°	11.4	11.8	12.0
20°	11.0	11.4	11.6
22.5°	10.3	11.0	11.4
25°	9.9	10.7	11.0
27.5°	9.5	10.5	11.0
30°	9.2	10.3	10.7
32.5°	8.8	10.1	10.5
35°	8.6	10.1	10.5
37.5°	8.6	9.9	10.5
40°	8.4	9.9	10.5
42.5°	8.4	9.9	10.5
45°	8.4	9.9	10.5
47.5°	8.2	9.9	10.7
50°	8.2	10.1	10.7
52.5°	8.2	10.1	10.7
55°	8.2	10.1	10.5
57.5°	7.9	9.9	10.5
60°	7.9	9.9	10.5
62.5°	7.5	9.7	10.3
65°	7.3	9.5	10.1
67.5°	6.9	9.2	9.7
70°	6.4	8.6	9.2
72.5°	5.8	8.2	8.8
75°	5.2	7.5	7.9
77.5°	4.5	6.7	7.1
80°	3.7	5.6	6.0
82.5°	2.8	4.3	4.5
85°	1.9	2.8	3.0
87.5°	0.9	1.3	1.5
90°	0.0	0.0	0.0

(END OF REPORT)