

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: P1337966

Luminaire Tested: P3A05R309827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1337966
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R309827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

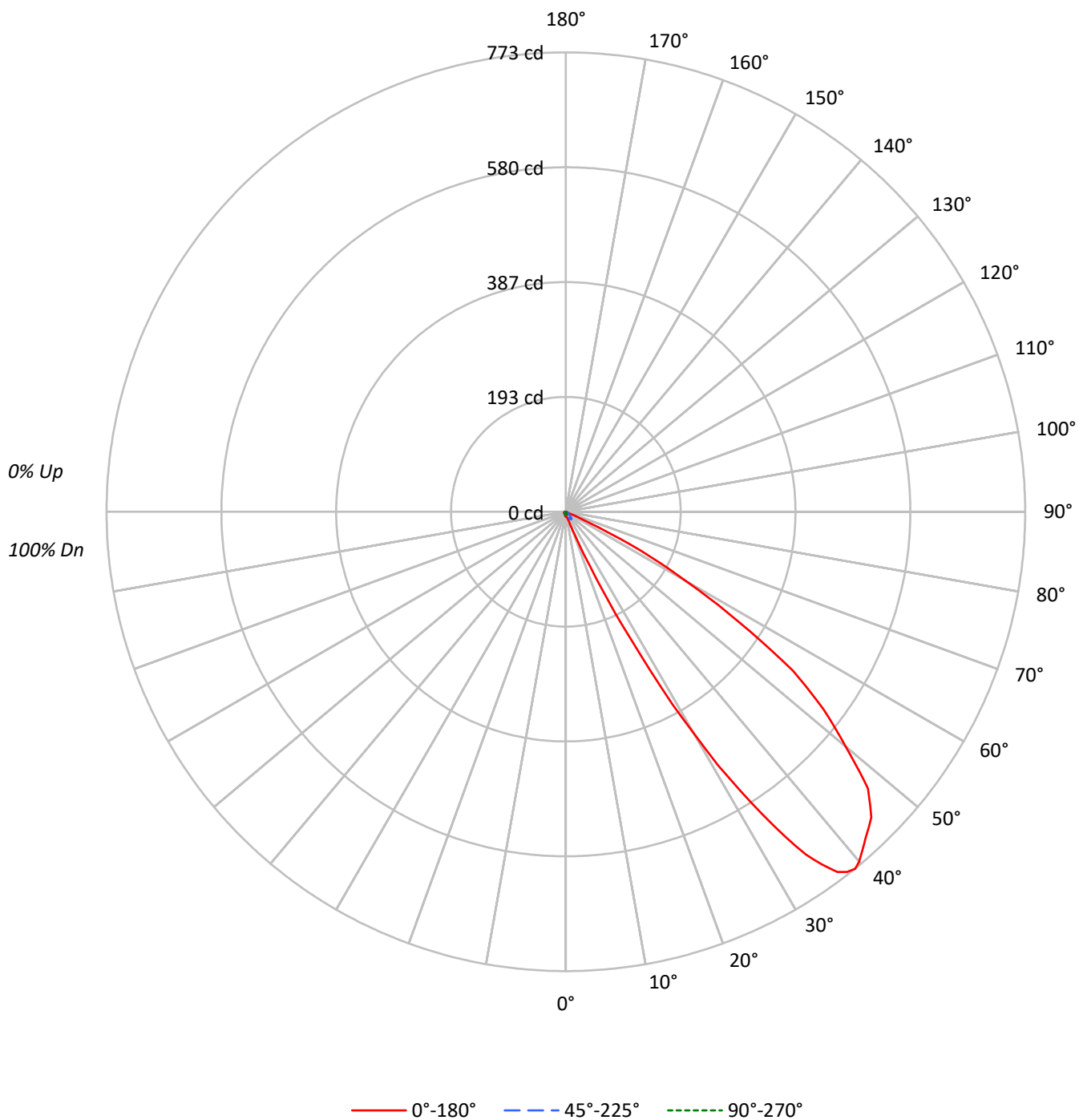
Lumens per Lamp: N/A
Luminaire Lumens: 201.0 lumens
Efficiency: N/A
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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			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	108	104	100	97	100	97	94		96	93	91		92	90	89	87
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	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	52	50
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48	42	37	35
7	62	48	38	32	60	47	38	32	45	37	31		44	36	31		42	36	31	29
8	56	42	33	27	55	41	33	27	40	32	26		39	32	26		37	31	26	24
9	52	37	29	23	50	37	28	23	36	28	22		34	27	22		33	27	22	20
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1710	1710	1710	1710	1710
5°	1827	1783	1673	1519	1497
10°	2004	1781	1470	1314	1291
15°	2929	1771	1226	1112	1158
20°	7351	1937	957	957	1073
25°	34115	2419	726	871	992
30°	108624	3342	557	810	987
35°	188509	4069	455	776	990
40°	219840	4065	344	773	1031
45°	225450	2884	372	837	1116
50°	209665	1603	273	853	1262
55°	178192	841	306	956	1415
60°	102930	219	351	1053	1579
65°	21014	0	415	1245	1764
70°	321	128	513	1410	2052
75°	254	169	593	1440	2457
80°	253	253	884	1768	2778
85°	0	503	1761	1761	3522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 225450 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.4
10°-20°	2.0	1.0
20°-30°	11.6	5.8
30°-40°	54.1	26.9
40°-50°	76.6	38.1
50°-60°	47.1	23.4
60°-70°	7.2	3.6
70°-80°	1.1	0.6
80°-90°	0.6	0.3
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°	14.3	7.1
0°-40°	68.5	34.1
0°-60°	192.1	95.6
0°-90°	201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	201.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	8	8	8	7	7	1
15°	13	8	5	5	5	5
25°	141	10	3	4	4	87
35°	704	15	2	3	4	423
45°	727	9	1	3	4	551
55°	466	2	1	2	4	397
65°	40	0	1	2	3	73
75°	0	0	1	2	3	0
85°	0	0	1	1	1	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
2.5°	8.0	8.0	8.1	8.1	8.0	8.1	8.1	8.1	7.8	7.6	7.3
5°	8.3	8.3	8.3	8.5	8.3	8.3	8.1	8.0	7.6	7.1	6.9
7.5°	8.6	8.6	8.5	8.6	8.5	8.5	8.1	7.8	7.3	6.8	6.4
10°	9.0	9.0	8.8	8.8	8.6	8.6	8.0	7.4	6.6	6.1	5.9
12.5°	10.0	10.0	9.8	9.7	9.3	9.1	7.8	6.9	5.9	5.4	5.2
15°	12.9	12.7	12.4	11.9	11.0	10.8	7.8	6.4	5.4	4.9	4.9
17.5°	17.6	17.4	16.9	15.6	14.1	13.5	7.8	5.8	4.7	4.4	4.4
20°	31.5	30.1	27.6	24.2	20.7	18.8	8.3	5.1	4.1	3.9	4.1
21°	41.1	39.8	36.6	31.0	24.7	22.7	8.6	4.9	3.9	3.7	4.1
22°	56.0	54.5	47.9	40.3	31.3	27.8	8.8	4.6	3.6	3.6	3.9
23°	78.2	75.7	64.5	52.3	39.1	34.0	9.1	4.4	3.4	3.6	3.7
24°	102.4	100.2	87.5	69.2	49.9	42.7	9.5	4.2	3.2	3.2	3.6
25°	141.0	138.5	116.0	87.4	63.3	51.3	10.0	3.9	3.0	3.0	3.6
26°	191.0	179.3	149.3	112.6	78.1	64.3	10.5	3.7	2.9	3.0	3.4
27°	238.4	228.7	195.0	144.4	96.5	79.1	11.2	3.6	2.7	2.9	3.4
28°	300.7	287.2	244.7	182.7	121.6	95.7	11.9	3.4	2.5	2.9	3.2
29°	370.5	351.5	300.2	225.7	149.8	114.3	12.5	3.2	2.4	2.7	3.2
30°	429.0	411.3	360.0	276.7	182.4	138.8	13.2	3.0	2.2	2.7	3.2
31°	497.8	470.9	408.7	319.8	210.3	163.4	13.9	2.7	2.0	2.5	3.0
32°	553.5	534.7	468.7	368.6	247.0	190.5	14.4	2.5	2.0	2.5	3.0
33°	607.3	582.1	518.3	415.3	280.2	218.2	14.9	2.4	1.9	2.4	3.0
34°	658.8	635.6	565.2	453.1	311.5	244.7	15.2	2.0	1.9	2.4	2.9
35°	704.2	677.3	606.5	490.0	343.7	268.7	15.2	1.9	1.7	2.2	2.9
36°	733.6	714.3	642.4	526.4	372.8	291.6	15.2	1.7	1.5	2.2	2.7
37°	758.9	736.3	671.2	554.3	394.3	309.8	15.2	1.5	1.5	2.2	2.7
38°	769.2	749.9	691.0	579.1	414.5	328.5	15.1	1.4	1.4	2.0	2.7
39°	773.3	756.0	705.9	596.8	429.4	341.0	14.7	1.2	1.4	2.0	2.7
40°	768.0	755.0	713.5	608.3	441.2	350.1	14.2	1.0	1.2	2.0	2.7
42.5°	746.3	737.7	711.8	619.9	451.4	356.9	12.4	0.7	1.2	1.9	2.7
45°	727.0	717.6	694.7	607.8	438.2	343.5	9.3	0.3	1.2	1.9	2.7
47.5°	689.6	683.7	665.7	577.2	409.2	313.4	6.6	0.2	1.0	1.7	2.5
50°	614.6	609.0	585.3	501.2	352.0	265.0	4.7	0.2	0.8	1.7	2.5
52.5°	547.4	541.5	507.4	416.7	270.4	194.2	3.0	0.2	0.8	1.7	2.5
55°	466.1	455.8	411.1	316.3	191.7	130.2	2.2	0.2	0.8	1.5	2.5
57.5°	345.1	330.0	290.0	215.7	110.4	70.6	1.2	0.2	0.8	1.5	2.5
60°	234.7	225.7	181.5	113.8	47.1	29.8	0.5	0.2	0.8	1.5	2.4
62.5°	142.2	130.9	91.3	48.4	20.3	13.5	0.0	0.3	0.8	1.5	2.4
65°	40.5	35.9	23.9	11.0	5.8	4.4	0.0	0.3	0.8	1.5	2.4
67.5°	1.4	1.4	1.4	1.2	0.8	0.8	0.2	0.3	0.8	1.5	2.2
70°	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.3	0.8	1.4	2.2
72.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.7	1.2	2.0
75°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.7	1.2	1.7
77.5°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.7	1.0	1.7
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	1.0	1.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.5	0.7	0.7	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.5	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.5	0.3
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):

	157.5°	180°
0°	7.8	7.8
2.5°	7.3	7.3
5°	6.8	6.8
7.5°	6.3	6.3
10°	5.8	5.8
12.5°	5.4	5.4
15°	4.9	5.1
17.5°	4.6	4.7
20°	4.4	4.6
21°	4.4	4.6
22°	4.2	4.4
23°	4.2	4.4
24°	4.1	4.2
25°	3.9	4.1
26°	3.9	4.1
27°	3.9	4.1
28°	3.7	4.1
29°	3.7	3.9
30°	3.7	3.9
31°	3.6	3.9
32°	3.6	3.9
33°	3.6	3.7
34°	3.4	3.7
35°	3.4	3.7
36°	3.4	3.7
37°	3.4	3.6
38°	3.4	3.7
39°	3.4	3.6
40°	3.4	3.6
42.5°	3.4	3.6
45°	3.4	3.6
47.5°	3.4	3.7
50°	3.4	3.7
52.5°	3.4	3.7
55°	3.4	3.7
57.5°	3.4	3.6
60°	3.4	3.6
62.5°	3.2	3.6
65°	3.2	3.4
67.5°	3.2	3.4
70°	3.0	3.2
72.5°	2.9	3.0
75°	2.5	2.9
77.5°	2.4	2.5
80°	2.0	2.2

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CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	1.7	1.7
85°	1.2	1.4
87.5°	0.7	0.7
90°	0.0	0.0

(END OF REPORT)