

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: P1311811

Luminaire Tested: P3SQAS24R459050D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311811
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS24R459050D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

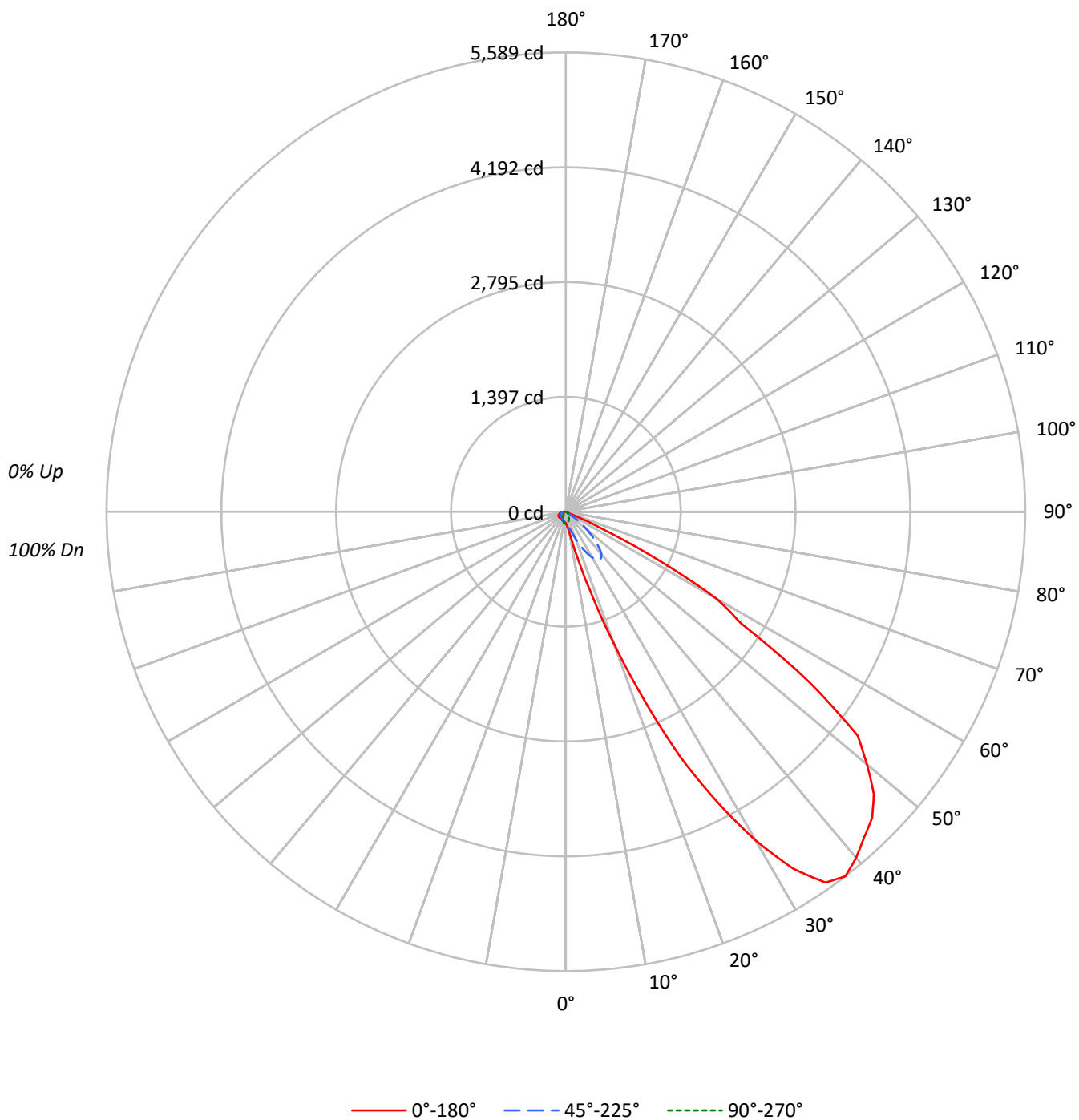
Lumens per Lamp: N/A
Luminaire Lumens: 2497.0 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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°	24869	24869	24869	24869	24869
5°	29597	27471	24618	22820	22820
10°	47270	32108	23084	21650	21650
15°	117712	43041	20968	20237	20968
20°	310066	64275	18144	19281	20417
25°	622603	95279	15677	18034	19991
30°	917844	127612	12727	17639	20523
35°	1157756	149652	10849	17345	21256
40°	1235232	151214	9735	18098	22729
45°	1283413	126140	9036	19607	24624
50°	1281379	87908	8842	21006	27650
55°	1089077	39034	9278	23540	30356
60°	731981	7819	9231	26281	34823
65°	194221	3382	9251	28567	39529
70°	5187	4179	9366	31169	44664
75°	4126	4126	9582	32938	50771
80°	4066	6149	10215	34812	57326
85°	4150	8102	16401	36754	57107

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1316467 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.4	0.6
10°-20°	70.4	2.8
20°-30°	290.5	11.6
30°-40°	612.2	24.5
40°-50°	755.3	30.2
50°-60°	566.1	22.7
60°-70°	145.7	5.8
70°-80°	30.2	1.2
80°-90°	12.3	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°	375.3	15.0
0°-40°	987.5	39.5
0°-60°	2308.9	92.5
0°-90°	2497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2497.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	144	144	144	144	144	
5°	171	159	142	132	132	19
15°	660	241	118	114	118	242
25°	3276	501	82	95	105	1527
35°	5507	712	52	82	101	3356
45°	5269	518	37	80	101	4032
55°	3627	130	31	78	101	3132
65°	477	8	23	70	97	687
75°	6	6	14	50	76	7
85°	2	4	8	19	29	2
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°	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4
2.5°	152.7	152.7	152.7	152.7	152.7	152.7	152.7	150.6	148.6	144.4	140.3
5°	171.2	169.2	169.2	169.2	167.1	165.1	165.1	158.9	150.6	142.4	136.2
7.5°	202.2	202.2	200.1	196.0	193.9	189.8	185.7	169.2	150.6	138.2	130.0
10°	270.3	266.2	260.0	255.8	245.5	231.1	220.8	183.6	148.6	132.0	125.9
12.5°	404.4	412.6	392.0	371.4	342.5	315.7	282.7	208.4	148.6	125.9	119.7
15°	660.2	674.7	635.5	594.2	524.1	458.0	396.1	241.4	144.4	117.6	111.4
17.5°	1079.1	1097.6	1031.6	934.6	825.3	693.2	579.8	286.8	140.3	109.4	105.2
20°	1691.8	1689.8	1561.9	1440.1	1229.7	1035.7	823.2	350.7	134.1	99.0	99.0
22.5°	2444.9	2453.2	2296.4	2077.7	1778.5	1466.9	1128.6	425.0	125.9	90.8	92.8
25°	3276.4	3206.2	3020.5	2754.4	2372.7	1941.5	1495.8	501.4	117.6	82.5	86.7
27.5°	3969.6	3901.5	3689.0	3373.3	2962.8	2451.1	1869.3	577.7	107.3	74.3	80.5
30°	4615.4	4528.7	4272.9	3916.0	3427.0	2874.1	2220.0	641.7	94.9	64.0	74.3
32.5°	5147.7	5069.3	4778.4	4363.7	3831.4	3237.2	2517.1	691.2	82.5	57.8	70.1
35°	5506.7	5426.2	5158.0	4702.1	4122.3	3501.3	2758.5	711.8	72.2	51.6	68.1
37.5°	5589.2	5545.9	5354.0	4926.9	4322.4	3670.5	2913.3	705.6	59.8	47.5	64.0
40°	5494.3	5504.6	5413.9	5059.0	4429.7	3742.7	2977.2	672.6	49.5	43.3	61.9
42.5°	5372.6	5399.4	5393.2	5112.6	4475.1	3746.8	2950.4	606.6	39.2	39.2	59.8
45°	5269.4	5296.3	5333.4	5089.9	4444.2	3693.1	2865.8	517.9	28.9	37.1	59.8
47.5°	5081.7	5110.6	5164.2	4908.4	4287.4	3554.9	2713.1	420.9	20.6	35.1	57.8
50°	4782.5	4797.0	4782.5	4495.7	3986.1	3332.1	2465.5	328.1	14.4	33.0	57.8
52.5°	4475.1	4446.2	4326.6	3963.4	3507.5	2979.3	2154.0	233.1	10.3	30.9	55.7
55°	3627.1	3581.7	3493.0	3270.2	3010.2	2546.0	1741.3	130.0	10.3	30.9	53.6
57.5°	2527.4	2552.2	2583.1	2537.7	2418.1	2005.4	1322.5	57.8	10.3	28.9	53.6
60°	2125.1	2104.5	2106.5	2077.7	1879.6	1462.8	909.9	22.7	10.3	26.8	51.6
62.5°	1268.9	1283.3	1310.1	1316.3	1120.3	817.0	476.6	10.3	10.3	24.8	49.5
65°	476.6	499.3	437.4	379.6	301.2	220.8	111.4	8.3	12.4	22.7	45.4
67.5°	14.4	16.5	20.6	18.6	18.6	16.5	12.4	8.3	12.4	20.6	43.3
70°	10.3	10.3	10.3	10.3	10.3	8.3	8.3	8.3	10.3	18.6	39.2
72.5°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	10.3	16.5	35.1
75°	6.2	8.3	6.2	6.2	6.2	6.2	6.2	6.2	10.3	14.4	28.9
77.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	8.3	12.4	24.8
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	6.2	8.3	10.3	20.6
82.5°	4.1	4.1	4.1	2.1	4.1	4.1	4.1	4.1	8.3	8.3	16.5
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.1	6.2	8.3	10.3
87.5°	0.0	0.0	0.0	0.0	2.1	2.1	2.1	4.1	6.2	6.2	6.2
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°	144.4	144.4	144.4
2.5°	136.2	136.2	136.2
5°	132.0	132.0	132.0
7.5°	127.9	127.9	127.9
10°	123.8	123.8	123.8
12.5°	119.7	119.7	121.7
15°	113.5	117.6	117.6
17.5°	109.4	113.5	115.5
20°	105.2	109.4	111.4
22.5°	99.0	105.2	109.4
25°	94.9	103.2	105.2
27.5°	90.8	101.1	105.2
30°	88.7	99.0	103.2
32.5°	84.6	97.0	101.1
35°	82.5	97.0	101.1
37.5°	82.5	94.9	101.1
40°	80.5	94.9	101.1
42.5°	80.5	94.9	101.1
45°	80.5	94.9	101.1
47.5°	78.4	94.9	103.2
50°	78.4	97.0	103.2
52.5°	78.4	97.0	103.2
55°	78.4	97.0	101.1
57.5°	76.3	94.9	101.1
60°	76.3	94.9	101.1
62.5°	72.2	92.8	99.0
65°	70.1	90.8	97.0
67.5°	66.0	88.7	92.8
70°	61.9	82.5	88.7
72.5°	55.7	78.4	84.6
75°	49.5	72.2	76.3
77.5°	43.3	64.0	68.1
80°	35.1	53.6	57.8
82.5°	26.8	41.3	43.3
85°	18.6	26.8	28.9
87.5°	8.3	12.4	14.4
90°	0.0	0.0	0.0

(END OF REPORT)