

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: P1315700

Luminaire Tested: P3SQAS20R459740D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315700
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: P3SQAS20R459740D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 97CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

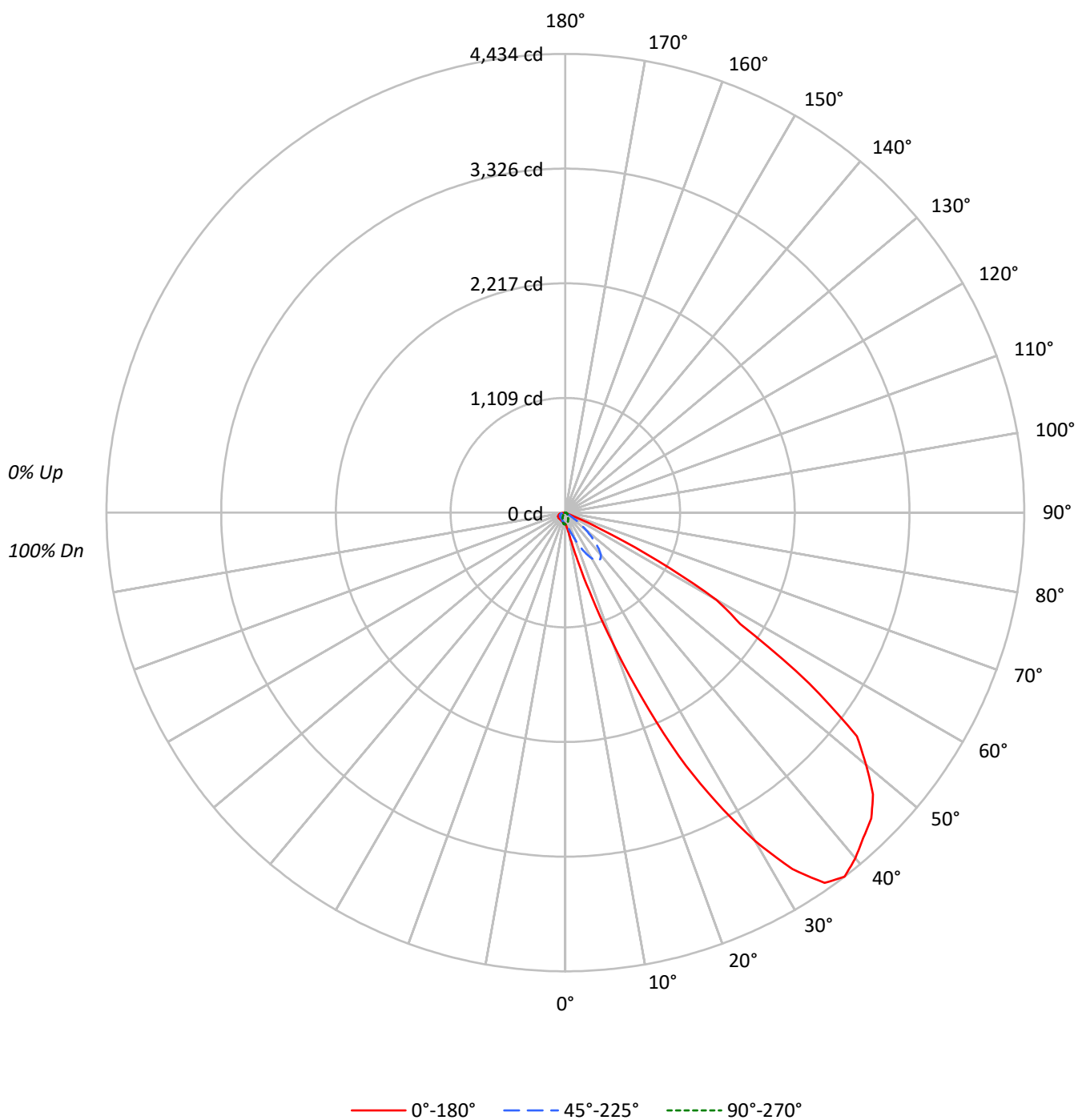
Lumens per Lamp: N/A
Luminaire Lumens: 1981.0 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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			0
RW	70	50	30	10	70	50	30	10	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	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°	19737	19737	19737	19737	19737
5°	23494	21783	19518	18118	18118
10°	37494	25480	18327	17173	17173
15°	93392	34144	16635	16047	16635
20°	245992	51006	14405	15304	16202
25°	493936	75593	12447	14309	15867
30°	728166	101242	10082	14000	16267
35°	918518	118725	8599	13771	16862
40°	979971	119964	7734	14344	18031
45°	1018201	100054	7185	15539	19533
50°	1016583	69742	7020	16665	21917
55°	864031	30957	7386	18676	24081
60°	580735	6200	7337	20873	27625
65°	154081	2649	7335	22699	31338
70°	4129	3273	7402	24724	35450
75°	3261	3261	7652	26151	40324
80°	3273	4860	8133	27572	45424
85°	3162	6521	12844	29048	45251

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1044414 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.4	0.6
10°-20°	55.9	2.8
20°-30°	230.5	11.6
30°-40°	485.7	24.5
40°-50°	599.2	30.2
50°-60°	449.1	22.7
60°-70°	115.6	5.8
70°-80°	23.9	1.2
80°-90°	9.7	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°	297.7	15.0
0°-40°	783.4	39.5
0°-60°	1831.7	92.5
0°-90°	1981.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1981.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	115	115	115	115	115	
5°	136	126	113	105	105	15
15°	524	192	93	90	93	192
25°	2599	398	66	75	84	1211
35°	4369	565	41	66	80	2662
45°	4180	411	30	64	80	3199
55°	2878	103	25	62	80	2485
65°	378	6	18	56	77	545
75°	5	5	12	39	61	6
85°	2	3	6	15	23	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°	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6
2.5°	121.1	121.1	121.1	121.1	121.1	121.1	121.1	119.5	117.9	114.6	111.3
5°	135.9	134.2	134.2	134.2	132.6	130.9	130.9	126.0	119.5	112.9	108.0
7.5°	160.4	160.4	158.8	155.5	153.9	150.6	147.3	134.2	119.5	109.7	103.1
10°	214.4	211.2	206.2	203.0	194.8	183.3	175.1	145.7	117.9	104.8	99.8
12.5°	320.8	327.4	311.0	294.6	271.7	250.4	224.2	165.3	117.9	99.8	94.9
15°	523.8	535.3	504.2	471.4	415.8	363.4	314.3	191.5	114.6	93.3	88.4
17.5°	856.1	870.8	818.4	741.5	654.7	550.0	460.0	227.5	111.3	86.8	83.5
20°	1342.2	1340.6	1239.1	1142.5	975.6	821.7	653.1	278.3	106.4	78.6	78.6
22.5°	1939.7	1946.2	1821.8	1648.3	1411.0	1163.8	895.4	337.2	99.8	72.0	73.7
25°	2599.3	2543.7	2396.4	2185.2	1882.4	1540.3	1186.7	397.8	93.3	65.5	68.7
27.5°	3149.3	3095.3	2926.7	2676.3	2350.5	1944.6	1483.0	458.3	85.1	58.9	63.8
30°	3661.6	3592.9	3389.9	3106.7	2718.8	2280.1	1761.3	509.1	75.3	50.7	58.9
32.5°	4083.9	4021.7	3791.0	3461.9	3039.6	2568.2	1997.0	548.3	65.5	45.8	55.7
35°	4368.8	4304.9	4092.1	3730.4	3270.4	2777.7	2188.5	564.7	57.3	40.9	54.0
37.5°	4434.2	4399.9	4247.6	3908.8	3429.2	2912.0	2311.2	559.8	47.5	37.6	50.7
40°	4358.9	4367.1	4295.1	4013.6	3514.3	2969.3	2362.0	533.6	39.3	34.4	49.1
42.5°	4262.4	4283.6	4278.7	4056.1	3550.3	2972.5	2340.7	481.2	31.1	31.1	47.5
45°	4180.5	4201.8	4231.3	4038.1	3525.8	2930.0	2273.6	410.8	22.9	29.5	47.5
47.5°	4031.6	4054.5	4097.0	3894.1	3401.4	2820.3	2152.5	333.9	16.4	27.8	45.8
50°	3794.2	3805.7	3794.2	3566.7	3162.4	2643.5	1956.0	260.3	11.5	26.2	45.8
52.5°	3550.3	3527.4	3432.5	3144.4	2782.6	2363.6	1708.9	185.0	8.2	24.6	44.2
55°	2877.6	2841.6	2771.2	2594.4	2388.2	2019.9	1381.5	103.1	8.2	24.6	42.6
57.5°	2005.1	2024.8	2049.3	2013.3	1918.4	1591.0	1049.2	45.8	8.2	22.9	42.6
60°	1686.0	1669.6	1671.2	1648.3	1491.2	1160.5	721.9	18.0	8.2	21.3	40.9
62.5°	1006.7	1018.1	1039.4	1044.3	888.8	648.2	378.1	8.2	8.2	19.6	39.3
65°	378.1	396.1	347.0	301.2	239.0	175.1	88.4	6.5	9.8	18.0	36.0
67.5°	11.5	13.1	16.4	14.7	14.7	13.1	9.8	6.5	9.8	16.4	34.4
70°	8.2	8.2	8.2	8.2	8.2	6.5	6.5	6.5	8.2	14.7	31.1
72.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	8.2	13.1	27.8
75°	4.9	6.5	4.9	4.9	4.9	4.9	4.9	4.9	8.2	11.5	22.9
77.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	6.5	9.8	19.6
80°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	4.9	6.5	8.2	16.4
82.5°	3.3	3.3	3.3	1.6	3.3	3.3	3.3	3.3	6.5	6.5	13.1
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.3	4.9	6.5	8.2
87.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.3	4.9	4.9	4.9
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°	114.6	114.6	114.6
2.5°	108.0	108.0	108.0
5°	104.8	104.8	104.8
7.5°	101.5	101.5	101.5
10°	98.2	98.2	98.2
12.5°	94.9	94.9	96.6
15°	90.0	93.3	93.3
17.5°	86.8	90.0	91.7
20°	83.5	86.8	88.4
22.5°	78.6	83.5	86.8
25°	75.3	81.8	83.5
27.5°	72.0	80.2	83.5
30°	70.4	78.6	81.8
32.5°	67.1	76.9	80.2
35°	65.5	76.9	80.2
37.5°	65.5	75.3	80.2
40°	63.8	75.3	80.2
42.5°	63.8	75.3	80.2
45°	63.8	75.3	80.2
47.5°	62.2	75.3	81.8
50°	62.2	76.9	81.8
52.5°	62.2	76.9	81.8
55°	62.2	76.9	80.2
57.5°	60.6	75.3	80.2
60°	60.6	75.3	80.2
62.5°	57.3	73.7	78.6
65°	55.7	72.0	76.9
67.5°	52.4	70.4	73.7
70°	49.1	65.5	70.4
72.5°	44.2	62.2	67.1
75°	39.3	57.3	60.6
77.5°	34.4	50.7	54.0
80°	27.8	42.6	45.8
82.5°	21.3	32.7	34.4
85°	14.7	21.3	22.9
87.5°	6.5	9.8	11.5
90°	0.0	0.0	0.0

(END OF REPORT)