

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: CORELITE

Report Number: P1055073

Luminaire Tested: SQ4R-FB-050D-840-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055073
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-FB-050D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

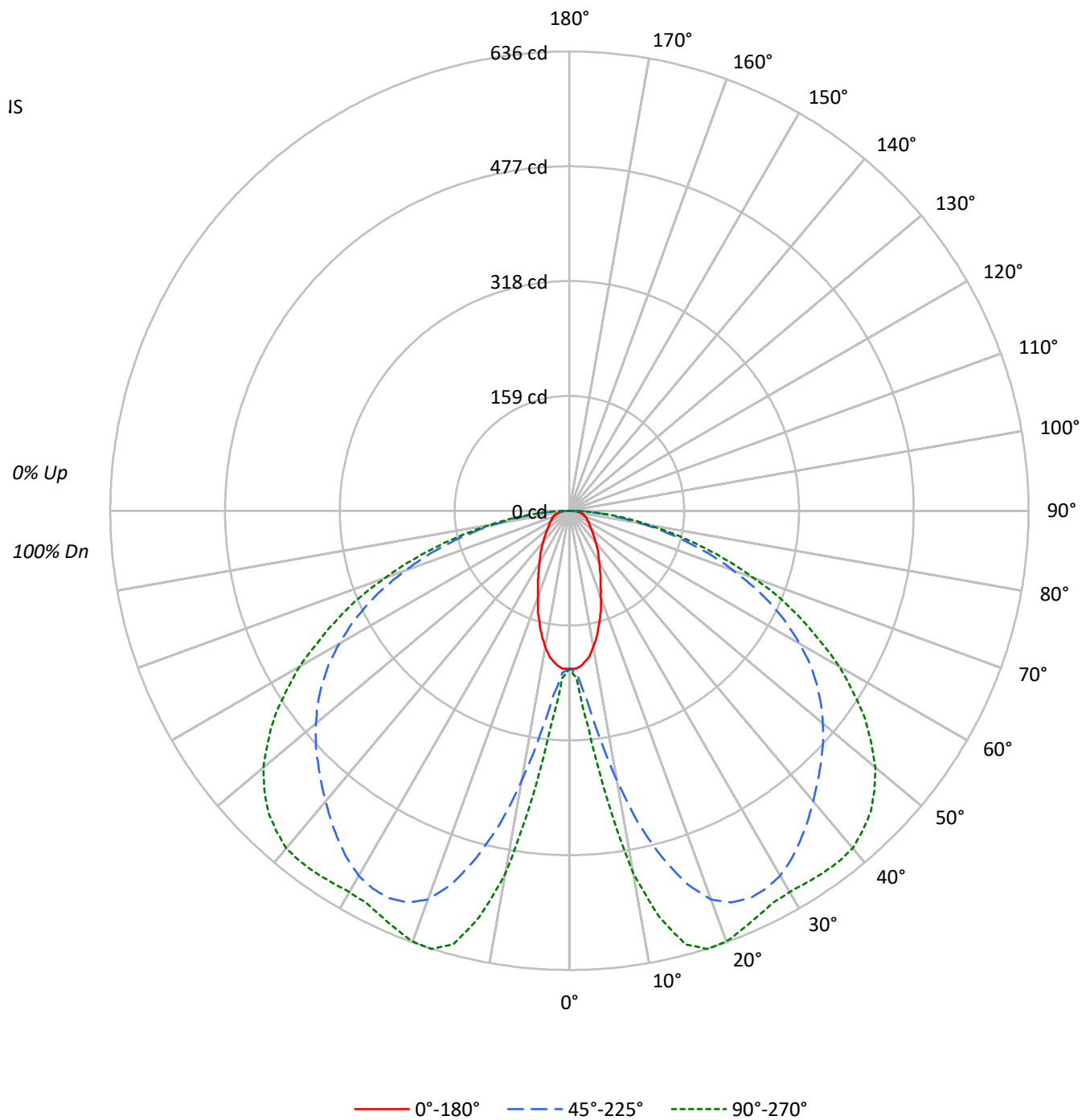
Lumens per Lamp: N/A
Luminaire Lumens: 1693.5 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 18.9
Input Voltage (V): 120
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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	60	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	59	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	37	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31
8	58	43	35	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	23	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2107	2107	2107
5°	2061	2489	2919
10°	1872	3709	4982
15°	1593	4954	6195
20°	1298	5871	6505
25°	1085	6289	6572
30°	916	6487	6777
35°	811	6552	7197
40°	708	6599	7670
45°	643	6708	8032
50°	590	6863	8287
55°	567	7018	8377
60°	583	7088	8308
65°	608	7071	8066
70°	653	6775	7628
75°	733	6335	6989
80°	821	5505	6087
85°	773	4661	5214

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 8377 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.3	1.7
10°-20°	125.5	7.4
20°-30°	219.5	13.0
30°-40°	282.6	16.7
40°-50°	315.7	18.6
50°-60°	302.3	17.9
60°-70°	239.6	14.1
70°-80°	140.9	8.3
80°-90°	39.1	2.3
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°	373.4	22.0
0°-40°	656.0	38.7
0°-60°	1273.9	75.2
0°-90°	1693.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1693.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	219	219	219	219	219	
5°	213	229	258	291	302	20
15°	160	295	497	602	622	44
25°	102	334	592	618	619	47
35°	69	320	558	589	612	43
45°	47	255	493	564	590	36
55°	34	162	418	486	499	31
65°	27	86	310	349	354	26
75°	20	53	170	187	188	21
85°	7	16	42	46	47	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	218.9	218.9	218.9	218.9	218.9	218.9	218.9	218.9	218.9	218.9	218.9
2.5°	218.9	218.9	220.3	221.0	222.4	223.1	224.5	226.0	230.2	230.9	232.3
5°	213.3	216.1	225.3	228.8	238.6	252.0	257.6	266.8	285.8	291.4	294.9
7.5°	204.8	211.2	233.7	239.3	264.0	299.2	313.9	333.7	363.9	378.7	390.7
10°	191.5	204.8	245.0	258.3	298.5	352.0	379.4	406.9	452.6	473.0	480.8
12.5°	176.7	198.5	256.9	275.2	332.9	411.1	444.2	474.4	526.5	554.0	558.2
15°	159.8	189.4	268.2	294.9	369.6	460.4	497.0	534.3	582.8	602.5	607.5
17.5°	145.0	182.3	278.7	306.9	397.7	504.7	542.0	573.0	612.4	625.8	629.3
20°	126.7	171.0	285.8	322.4	427.3	537.1	573.0	596.9	623.7	632.1	633.5
22.5°	113.3	159.1	290.0	328.0	447.0	556.8	587.1	606.1	624.4	627.2	627.9
25°	102.1	145.7	289.3	334.4	463.9	568.8	592.0	606.1	616.6	618.0	618.0
27.5°	91.5	130.9	286.5	335.8	476.5	571.6	589.9	599.7	604.7	607.5	607.5
30°	82.4	116.8	279.5	332.9	482.2	568.8	583.5	588.5	593.4	597.6	599.7
32.5°	75.3	103.5	268.9	327.3	482.9	561.7	572.3	575.1	582.1	592.0	595.5
35°	69.0	90.1	256.9	319.6	478.7	550.5	557.5	560.3	574.4	589.2	594.1
37.5°	62.6	80.2	241.4	306.2	472.3	537.1	542.0	546.9	568.8	586.4	592.0
40°	56.3	71.8	223.1	291.4	462.5	520.9	525.1	532.9	561.7	582.1	587.8
42.5°	51.4	64.8	203.4	275.9	449.8	502.6	508.9	520.2	553.3	575.1	581.4
45°	47.2	57.7	182.3	254.8	433.6	483.6	492.7	508.2	543.4	564.5	570.2
47.5°	42.9	52.8	160.5	233.0	416.0	464.6	476.5	494.1	530.0	550.5	555.4
50°	39.4	47.9	138.7	209.8	397.0	444.2	458.2	476.5	513.1	532.2	538.5
52.5°	36.6	43.6	118.3	186.5	375.2	423.0	439.2	458.2	492.7	511.0	515.3
55°	33.8	40.1	100.7	161.9	352.7	400.5	418.1	436.4	470.2	485.7	488.5
57.5°	32.4	37.3	85.9	138.7	328.7	375.2	394.9	411.8	443.5	455.4	458.2
60°	30.3	35.2	74.6	119.0	302.7	351.3	368.1	385.0	411.8	421.6	423.8
62.5°	28.2	33.8	66.2	100.0	275.9	323.1	340.0	355.5	378.0	385.0	387.9
65°	26.7	32.4	59.8	85.9	248.5	293.5	310.4	323.8	342.1	349.1	350.5
67.5°	25.3	31.0	54.9	73.9	221.0	264.0	276.6	289.3	303.4	310.4	311.1
70°	23.2	29.6	50.7	65.5	192.9	230.2	240.7	254.1	265.4	268.9	271.0
72.5°	21.8	27.5	47.9	59.1	164.0	197.8	207.7	215.4	225.3	228.8	228.8
75°	19.7	24.6	45.1	52.8	134.4	161.9	170.3	178.1	185.8	187.2	185.1
77.5°	17.6	21.8	38.7	44.3	104.9	128.1	135.2	139.4	145.7	147.1	147.8
80°	14.8	19.0	30.3	34.5	76.0	94.3	99.3	102.8	108.4	108.4	109.8
82.5°	11.3	14.8	21.8	24.6	51.4	64.8	69.0	71.1	74.6	74.6	74.6
85°	7.0	9.2	14.1	16.2	31.0	39.4	42.2	42.9	45.8	46.5	46.5
87.5°	3.5	4.9	9.2	9.9	16.2	20.4	20.4	21.8	21.8	21.1	20.4
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):

	80°	90°
0°	218.9	218.9
2.5°	233.7	232.3
5°	300.6	302.0
7.5°	404.7	404.0
10°	503.3	509.6
12.5°	575.1	576.5
15°	618.7	621.6
17.5°	635.6	636.3
20°	636.3	634.9
22.5°	628.6	627.2
25°	619.4	618.7
27.5°	611.0	611.7
30°	607.5	609.6
32.5°	607.5	611.0
35°	608.9	612.4
37.5°	608.2	612.4
40°	605.4	610.3
42.5°	597.6	601.1
45°	585.7	589.9
47.5°	570.2	573.0
50°	550.5	553.3
52.5°	525.8	526.5
55°	496.3	499.1
57.5°	464.6	465.3
60°	429.4	431.5
62.5°	392.1	392.1
65°	352.7	354.1
67.5°	311.8	315.4
70°	270.3	271.0
72.5°	229.5	229.5
75°	187.2	187.9
77.5°	147.1	147.1
80°	109.1	109.8
82.5°	75.3	76.7
85°	47.2	47.2
87.5°	21.8	19.7
90°	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	8.79	10.51	9.16	10.83	11.14	21.12	22.83	21.48	23.15	23.46
	3H	9.73	11.29	10.11	11.61	11.97	23.03	24.59	23.40	24.91	25.27
	4H	10.20	11.68	10.60	12.02	12.40	23.72	25.19	24.12	25.54	25.91
	6H	10.69	12.06	11.10	12.42	12.81	24.21	25.58	24.62	25.94	26.33
	8H	10.90	12.20	11.32	12.59	12.99	24.36	25.67	24.78	26.06	26.45
	12H	11.03	12.29	11.46	12.67	13.10	24.46	25.72	24.89	26.10	26.53
4H	2H	16.13	17.60	16.52	17.95	18.32	21.63	23.10	22.03	23.45	23.82
	3H	18.06	19.31	18.47	19.70	20.10	23.81	25.05	24.22	25.45	25.85
	4H	18.26	19.38	18.69	19.79	20.23	24.65	25.78	25.08	26.19	26.62
	6H	18.38	19.36	18.83	19.80	20.25	25.28	26.26	25.73	26.70	27.15
	8H	18.40	19.33	18.86	19.77	20.23	25.48	26.40	25.93	26.84	27.31
	12H	18.43	19.26	18.91	19.74	20.20	25.63	26.46	26.11	26.94	27.40
8H	4H	19.91	20.84	20.37	21.28	21.74	24.89	25.82	25.35	26.26	26.72
	6H	20.36	21.13	20.85	21.62	22.09	25.64	26.42	26.13	26.90	27.37
	8H	20.44	21.14	20.95	21.64	22.12	25.92	26.61	26.42	27.12	27.60
	12H	20.49	21.10	20.99	21.59	22.15	26.15	26.76	26.65	27.25	27.81
12H	4H	20.12	20.96	20.60	21.43	21.90	24.90	25.73	25.38	26.21	26.67
	6H	20.70	21.39	21.20	21.90	22.38	25.67	26.36	26.17	26.87	27.35
	8H	20.91	21.52	21.41	22.01	22.57	26.00	26.62	26.51	27.11	27.66

END OF REPORT