

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: P1055071

Luminaire Tested: SQ4R-FB-050D-830-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055071
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-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

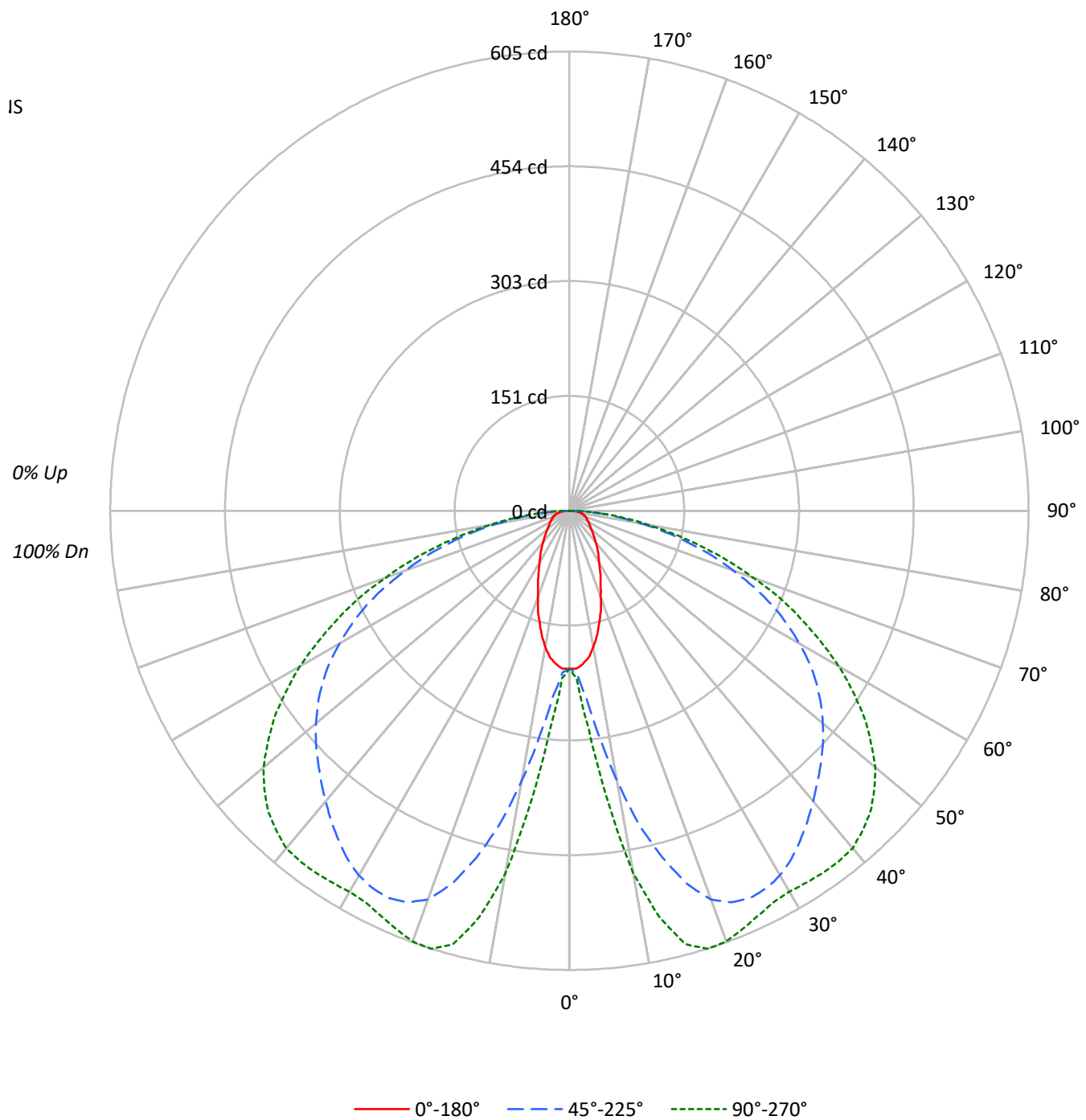
Lumens per Lamp: N/A
Luminaire Lumens: 1610.5 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2004	2004	2004
5°	1960	2368	2776
10°	1780	3527	4738
15°	1515	4710	5891
20°	1235	5583	6186
25°	1031	5981	6250
30°	870	6169	6444
35°	771	6231	6845
40°	674	6276	7294
45°	611	6380	7638
50°	562	6527	7881
55°	539	6674	7966
60°	555	6741	7900
65°	579	6725	7670
70°	622	6443	7254
75°	696	6026	6647
80°	782	5234	5788
85°	740	4441	4960

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 7966 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	1.7
10°-20°	119.4	7.4
20°-30°	208.8	13.0
30°-40°	268.7	16.7
40°-50°	300.2	18.6
50°-60°	287.5	17.9
60°-70°	227.8	14.1
70°-80°	134.0	8.3
80°-90°	37.2	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°	355.0	22.0
0°-40°	623.8	38.7
0°-60°	1211.5	75.2
0°-90°	1610.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1610.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	208	208	208	208	208	
5°	203	218	245	277	287	19
15°	152	280	473	573	591	42
25°	97	318	563	588	588	45
35°	66	304	530	560	582	41
45°	45	242	469	537	561	35
55°	32	154	398	462	475	29
65°	25	82	295	332	337	25
75°	19	50	162	178	179	20
85°	7	15	40	44	45	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°	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2	208.2
2.5°	208.2	208.2	209.5	210.2	211.5	212.2	213.5	214.9	218.9	219.6	220.9
5°	202.8	205.5	214.2	217.6	226.9	239.6	245.0	253.7	271.8	277.1	280.5
7.5°	194.8	200.8	222.2	227.6	251.0	284.5	298.6	317.3	346.1	360.1	371.5
10°	182.1	194.8	233.0	245.7	283.8	334.7	360.8	386.9	430.4	449.8	457.2
12.5°	168.0	188.8	244.3	261.7	316.6	390.9	422.4	451.2	500.7	526.8	530.8
15°	152.0	180.1	255.0	280.5	351.4	437.8	472.6	508.1	554.3	573.0	577.7
17.5°	137.9	173.4	265.1	291.9	378.2	480.0	515.4	544.9	582.4	595.1	598.5
20°	120.5	162.7	271.8	306.6	406.3	510.8	544.9	567.7	593.1	601.1	602.5
22.5°	107.8	151.3	275.8	311.9	425.1	529.5	558.3	576.4	593.8	596.4	597.1
25°	97.1	138.6	275.1	318.0	441.1	540.9	563.0	576.4	586.4	587.7	587.7
27.5°	87.0	124.5	272.4	319.3	453.2	543.6	561.0	570.3	575.0	577.7	577.7
30°	78.3	111.1	265.8	316.6	458.5	540.9	554.9	559.6	564.3	568.3	570.3
32.5°	71.6	98.4	255.7	311.3	459.2	534.2	544.2	546.9	553.6	563.0	566.3
35°	65.6	85.7	244.3	303.9	455.2	523.5	530.2	532.8	546.2	560.3	565.0
37.5°	59.6	76.3	229.6	291.2	449.2	510.8	515.4	520.1	540.9	557.6	563.0
40°	53.6	68.3	212.2	277.1	439.8	495.4	499.4	506.7	534.2	553.6	559.0
42.5°	48.9	61.6	193.5	262.4	427.8	478.0	484.0	494.7	526.2	546.9	552.9
45°	44.9	54.9	173.4	242.3	412.4	459.9	468.6	483.3	516.8	536.9	542.2
47.5°	40.8	50.2	152.6	221.6	395.6	441.8	453.2	469.9	504.1	523.5	528.2
50°	37.5	45.5	131.9	199.5	377.5	422.4	435.8	453.2	488.0	506.1	512.1
52.5°	34.8	41.5	112.5	177.4	356.8	402.3	417.7	435.8	468.6	486.0	490.0
55°	32.1	38.2	95.7	154.0	335.4	380.9	397.6	415.0	447.2	461.9	464.6
57.5°	30.8	35.5	81.7	131.9	312.6	356.8	375.5	391.6	421.7	433.1	435.8
60°	28.8	33.5	71.0	113.1	287.8	334.0	350.1	366.2	391.6	401.0	403.0
62.5°	26.8	32.1	62.9	95.1	262.4	307.3	323.3	338.1	359.5	366.2	368.8
65°	25.4	30.8	56.9	81.7	236.3	279.1	295.2	307.9	325.3	332.0	333.4
67.5°	24.1	29.5	52.2	70.3	210.2	251.0	263.1	275.1	288.5	295.2	295.9
70°	22.1	28.1	48.2	62.3	183.4	218.9	228.9	241.7	252.4	255.7	257.7
72.5°	20.8	26.1	45.5	56.2	156.0	188.1	197.5	204.8	214.2	217.6	217.6
75°	18.7	23.4	42.8	50.2	127.9	154.0	162.0	169.4	176.7	178.1	176.1
77.5°	16.7	20.8	36.8	42.2	99.7	121.8	128.5	132.5	138.6	139.9	140.6
80°	14.1	18.1	28.8	32.8	72.3	89.7	94.4	97.7	103.1	103.1	104.4
82.5°	10.7	14.1	20.8	23.4	48.9	61.6	65.6	67.6	71.0	71.0	71.0
85°	6.7	8.7	13.4	15.4	29.5	37.5	40.2	40.8	43.5	44.2	44.2
87.5°	3.3	4.7	8.7	9.4	15.4	19.4	19.4	20.8	20.8	20.1	19.4
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°	208.2	208.2
2.5°	222.2	220.9
5°	285.8	287.2
7.5°	384.9	384.2
10°	478.6	484.7
12.5°	546.9	548.2
15°	588.4	591.1
17.5°	604.5	605.1
20°	605.1	603.8
22.5°	597.8	596.4
25°	589.1	588.4
27.5°	581.0	581.7
30°	577.7	579.7
32.5°	577.7	581.0
35°	579.0	582.4
37.5°	578.4	582.4
40°	575.7	580.4
42.5°	568.3	571.7
45°	556.9	561.0
47.5°	542.2	544.9
50°	523.5	526.2
52.5°	500.0	500.7
55°	471.9	474.6
57.5°	441.8	442.5
60°	408.3	410.3
62.5°	372.9	372.9
65°	335.4	336.7
67.5°	296.5	299.9
70°	257.1	257.7
72.5°	218.2	218.2
75°	178.1	178.7
77.5°	139.9	139.9
80°	103.8	104.4
82.5°	71.6	73.0
85°	44.9	44.9
87.5°	20.8	18.7
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	8.62	10.34	8.99	10.65	10.97	20.94	22.66	21.31	22.97	23.29
	3H	9.56	11.12	9.93	11.44	11.80	22.85	24.41	23.23	24.74	25.10
	4H	10.03	11.50	10.43	11.85	12.22	23.55	25.02	23.94	25.37	25.74
	6H	10.52	11.89	10.93	12.25	12.64	24.03	25.40	24.44	25.76	26.15
	8H	10.72	12.03	11.14	12.42	12.82	24.19	25.49	24.61	25.88	26.28
	12H	10.86	12.12	11.29	12.50	12.92	24.29	25.55	24.72	25.93	26.35
4H	2H	15.95	17.42	16.35	17.77	18.14	21.45	22.93	21.85	23.27	23.65
	3H	17.89	19.13	18.30	19.53	19.93	23.64	24.88	24.05	25.27	25.67
	4H	18.08	19.21	18.51	19.62	20.05	24.48	25.60	24.91	26.02	26.45
	6H	18.20	19.19	18.65	19.63	20.08	25.10	26.09	25.55	26.53	26.98
	8H	18.23	19.16	18.69	19.60	20.06	25.30	26.23	25.76	26.67	27.13
	12H	18.25	19.09	18.73	19.56	20.03	25.46	26.29	25.93	26.76	27.23
8H	4H	19.74	20.66	20.19	21.10	21.56	24.72	25.64	25.17	26.08	26.55
	6H	20.18	20.96	20.67	21.44	21.91	25.47	26.24	25.96	26.73	27.20
	8H	20.27	20.96	20.77	21.46	21.95	25.74	26.44	26.25	26.94	27.42
	12H	20.31	20.92	20.81	21.41	21.97	25.97	26.59	26.48	27.07	27.63
12H	4H	19.95	20.78	20.42	21.25	21.72	24.72	25.56	25.20	26.03	26.50
	6H	20.52	21.22	21.03	21.72	22.21	25.49	26.19	26.00	26.69	27.18
	8H	20.74	21.35	21.24	21.84	22.40	25.83	26.44	26.33	26.93	27.49

END OF REPORT