

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: P1055074

Luminaire Tested: SQ4R-FB-050D-927-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055074
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-927-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

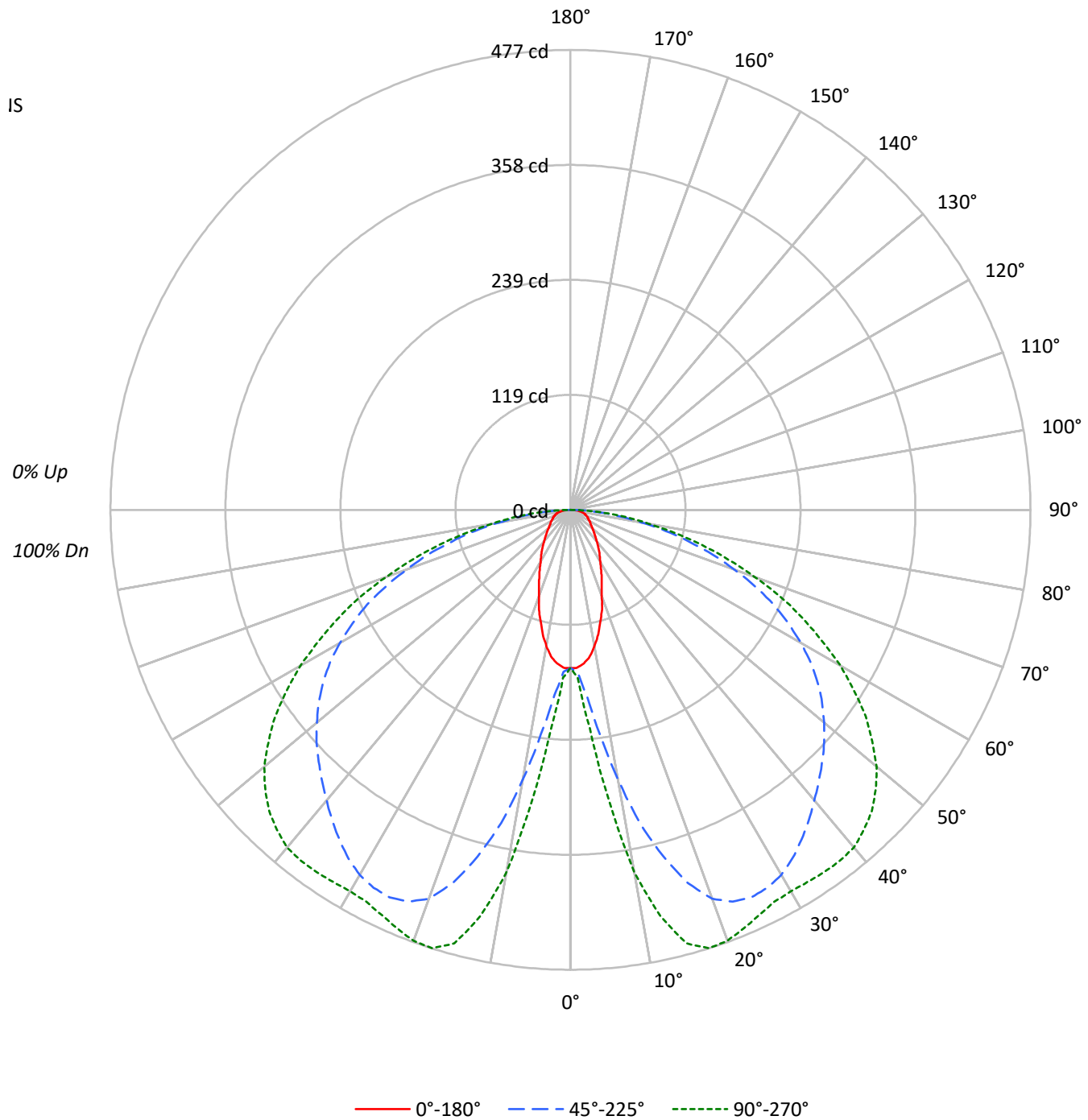
Lumens per Lamp: N/A
Luminaire Lumens: 1268.7 lumens
Efficiency: N/A
Efficacy: 67.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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°	1579	1579	1579
5°	1544	1865	2186
10°	1402	2778	3732
15°	1193	3711	4641
20°	972	4397	4873
25°	813	4711	4924
30°	686	4859	5077
35°	608	4908	5392
40°	530	4944	5746
45°	481	5025	6017
50°	442	5142	6208
55°	425	5257	6276
60°	437	5310	6223
65°	456	5296	6041
70°	490	5075	5714
75°	551	4746	5237
80°	615	4125	4563
85°	585	3491	3899

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 6276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.2	1.7
10°-20°	94.0	7.4
20°-30°	164.5	13.0
30°-40°	211.7	16.7
40°-50°	236.5	18.6
50°-60°	226.5	17.9
60°-70°	179.5	14.1
70°-80°	105.5	8.3
80°-90°	29.3	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°	279.7	22.0
0°-40°	491.4	38.7
0°-60°	954.3	75.2
0°-90°	1268.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1268.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	164	164	164	164	164	
5°	160	171	193	218	226	15
15°	120	221	372	451	466	33
25°	76	250	444	463	464	35
35°	52	239	418	441	459	32
45°	35	191	369	423	442	27
55°	25	121	313	364	374	23
65°	20	64	232	262	265	20
75°	15	40	128	140	141	15
85°	5	12	32	35	35	6
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°	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0	164.0
2.5°	164.0	164.0	165.1	165.6	166.6	167.2	168.2	169.3	172.4	173.0	174.0
5°	159.8	161.9	168.7	171.4	178.8	188.8	193.0	199.9	214.1	218.3	220.9
7.5°	153.5	158.2	175.1	179.3	197.7	224.1	235.2	250.0	272.6	283.7	292.7
10°	143.4	153.5	183.5	193.5	223.6	263.7	284.2	304.8	339.1	354.4	360.2
12.5°	132.4	148.7	192.5	206.2	249.4	308.0	332.7	355.4	394.4	415.0	418.2
15°	119.7	141.8	200.9	220.9	276.8	344.9	372.3	400.2	436.6	451.4	455.1
17.5°	108.6	136.6	208.8	229.9	297.9	378.1	406.0	429.2	458.8	468.8	471.4
20°	94.9	128.1	214.1	241.5	320.1	402.3	429.2	447.2	467.2	473.5	474.6
22.5°	84.9	119.2	217.3	245.7	334.8	417.1	439.8	454.0	467.7	469.8	470.4
25°	76.5	109.2	216.7	250.5	347.5	426.1	443.5	454.0	461.9	463.0	463.0
27.5°	68.6	98.1	214.6	251.5	357.0	428.2	441.9	449.3	453.0	455.1	455.1
30°	61.7	87.5	209.3	249.4	361.2	426.1	437.1	440.8	444.5	447.7	449.3
32.5°	56.4	77.5	201.4	245.2	361.7	420.8	428.7	430.8	436.1	443.5	446.1
35°	51.7	67.5	192.5	239.4	358.6	412.4	417.6	419.7	430.3	441.4	445.1
37.5°	46.9	60.1	180.9	229.4	353.8	402.3	406.0	409.7	426.1	439.3	443.5
40°	42.2	53.8	167.2	218.3	346.5	390.2	393.4	399.2	420.8	436.1	440.3
42.5°	38.5	48.5	152.4	206.7	337.0	376.5	381.3	389.7	414.5	430.8	435.6
45°	35.3	43.2	136.6	190.9	324.8	362.3	369.1	380.7	407.1	422.9	427.1
47.5°	32.2	39.5	120.2	174.5	311.6	348.0	357.0	370.2	397.1	412.4	416.1
50°	29.5	35.9	103.9	157.1	297.4	332.7	343.3	357.0	384.4	398.7	403.4
52.5°	27.4	32.7	88.6	139.7	281.1	316.9	329.0	343.3	369.1	382.8	386.0
55°	25.3	30.1	75.4	121.3	264.2	300.0	313.2	326.9	352.3	363.9	366.0
57.5°	24.3	27.9	64.3	103.9	246.3	281.1	295.8	308.5	332.2	341.2	343.3
60°	22.7	26.4	55.9	89.1	226.7	263.1	275.8	288.4	308.5	315.9	317.4
62.5°	21.1	25.3	49.6	74.9	206.7	242.0	254.7	266.3	283.2	288.4	290.6
65°	20.0	24.3	44.8	64.3	186.1	219.9	232.5	242.6	256.3	261.6	262.6
67.5°	19.0	23.2	41.1	55.4	165.6	197.7	207.2	216.7	227.3	232.5	233.1
70°	17.4	22.1	38.0	49.0	144.5	172.4	180.3	190.4	198.8	201.4	203.0
72.5°	16.3	20.6	35.9	44.3	122.9	148.2	155.6	161.4	168.7	171.4	171.4
75°	14.8	18.5	33.7	39.5	100.7	121.3	127.6	133.4	139.2	140.3	138.7
77.5°	13.2	16.3	29.0	33.2	78.6	96.0	101.2	104.4	109.2	110.2	110.7
80°	11.1	14.2	22.7	25.8	57.0	70.7	74.4	77.0	81.2	81.2	82.3
82.5°	8.4	11.1	16.3	18.5	38.5	48.5	51.7	53.3	55.9	55.9	55.9
85°	5.3	6.9	10.5	12.1	23.2	29.5	31.6	32.2	34.3	34.8	34.8
87.5°	2.6	3.7	6.9	7.4	12.1	15.3	15.3	16.3	16.3	15.8	15.3
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):

	80°	90°
0°	164.0	164.0
2.5°	175.1	174.0
5°	225.2	226.2
7.5°	303.2	302.7
10°	377.0	381.8
12.5°	430.8	431.9
15°	463.5	465.6
17.5°	476.2	476.7
20°	476.7	475.6
22.5°	470.9	469.8
25°	464.0	463.5
27.5°	457.7	458.2
30°	455.1	456.7
32.5°	455.1	457.7
35°	456.1	458.8
37.5°	455.6	458.8
40°	453.5	457.2
42.5°	447.7	450.3
45°	438.7	441.9
47.5°	427.1	429.2
50°	412.4	414.5
52.5°	393.9	394.4
55°	371.8	373.9
57.5°	348.0	348.6
60°	321.7	323.2
62.5°	293.7	293.7
65°	264.2	265.2
67.5°	233.6	236.2
70°	202.5	203.0
72.5°	171.9	171.9
75°	140.3	140.8
77.5°	110.2	110.2
80°	81.7	82.3
82.5°	56.4	57.5
85°	35.3	35.3
87.5°	16.3	14.8
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	7.79	9.50	8.15	9.82	10.13	20.11	21.83	20.48	22.14	22.46
	3H	8.72	10.28	9.10	10.60	10.96	22.03	23.58	22.40	23.91	24.27
	4H	9.20	10.67	9.59	11.02	11.39	22.72	24.19	23.12	24.54	24.91
	6H	9.69	11.05	10.10	11.42	11.81	23.20	24.57	23.61	24.93	25.32
	8H	9.89	11.20	10.31	11.58	11.98	23.36	24.67	23.78	25.05	25.45
	12H	10.03	11.28	10.45	11.66	12.09	23.46	24.72	23.89	25.10	25.53
4H	2H	15.12	16.59	15.52	16.94	17.31	20.63	22.10	21.02	22.44	22.82
	3H	17.06	18.30	17.47	18.70	19.10	22.81	24.05	23.22	24.44	24.84
	4H	17.25	18.38	17.68	18.79	19.22	23.65	24.77	24.08	25.19	25.62
	6H	17.37	18.36	17.82	18.80	19.25	24.27	25.26	24.72	25.70	26.15
	8H	17.40	18.33	17.86	18.77	19.23	24.47	25.40	24.93	25.84	26.30
	12H	17.42	18.26	17.90	18.73	19.20	24.63	25.46	25.10	25.93	26.40
8H	4H	18.91	19.83	19.36	20.27	20.74	23.89	24.81	24.34	25.25	25.72
	6H	19.35	20.13	19.84	20.61	21.09	24.64	25.41	25.13	25.90	26.37
	8H	19.44	20.13	19.94	20.64	21.12	24.92	25.61	25.42	26.11	26.60
	12H	19.48	20.10	19.99	20.58	21.14	25.14	25.76	25.65	26.24	26.80
12H	4H	19.12	19.95	19.60	20.43	20.89	23.90	24.73	24.37	25.20	25.67
	6H	19.70	20.39	20.20	20.89	21.38	24.67	25.36	25.17	25.86	26.35
	8H	19.91	20.52	20.41	21.01	21.57	25.00	25.61	25.50	26.10	26.66

END OF REPORT