

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: P1055075

Luminaire Tested: SQ4R-FB-050D-930-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055075
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-930-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

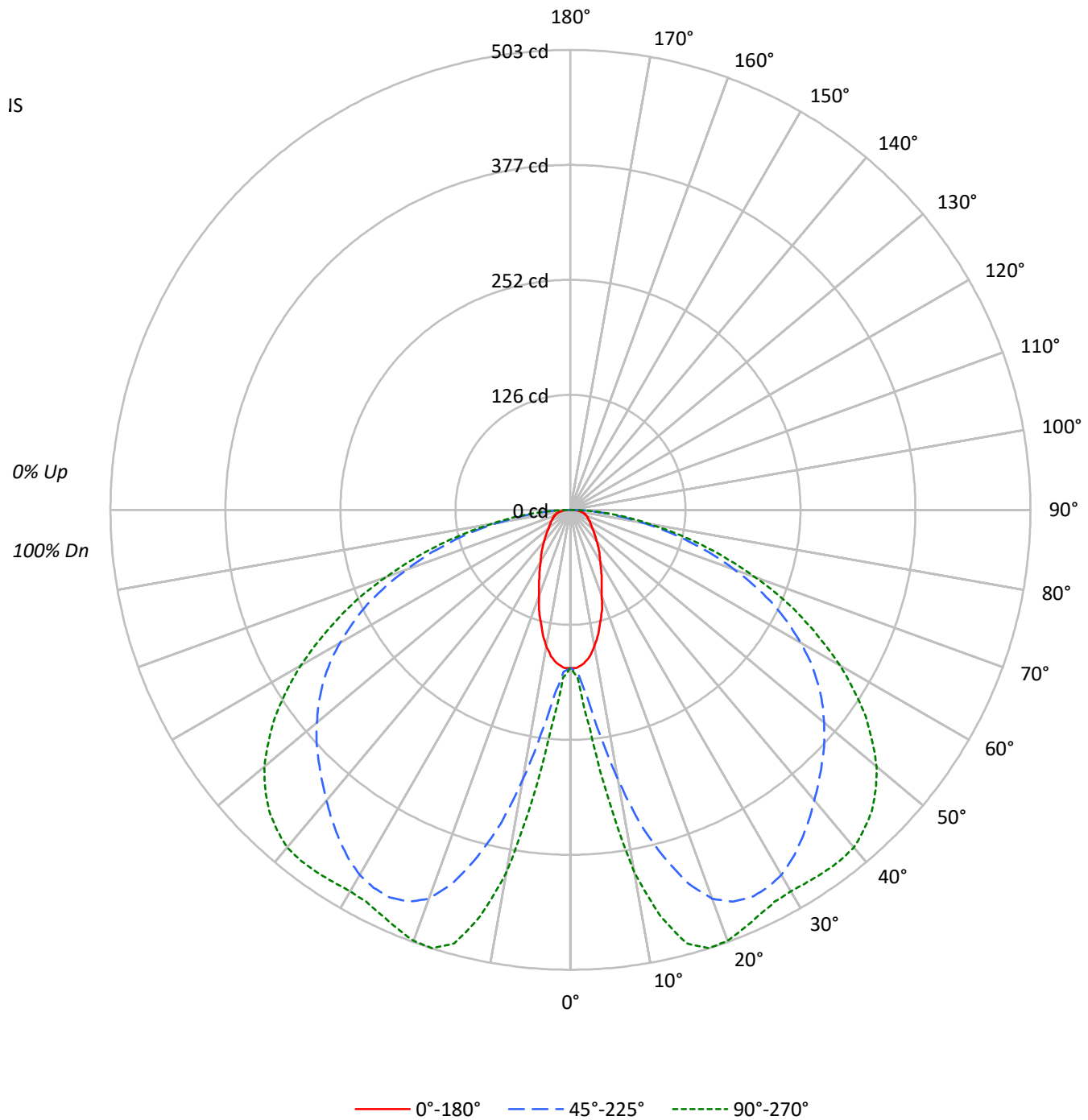
Lumens per Lamp: N/A
Luminaire Lumens: 1337.9 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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°	1665	1665	1665
5°	1628	1967	2306
10°	1479	2930	3936
15°	1258	3913	4894
20°	1026	4638	5139
25°	856	4968	5192
30°	724	5125	5354
35°	641	5176	5686
40°	559	5214	6059
45°	508	5300	6345
50°	466	5422	6547
55°	448	5544	6618
60°	460	5599	6564
65°	481	5586	6372
70°	518	5354	6027
75°	580	5007	5524
80°	649	4347	4812
85°	619	3689	4120

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 6618 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	1.7
10°-20°	99.2	7.4
20°-30°	173.4	13.0
30°-40°	223.3	16.7
40°-50°	249.4	18.6
50°-60°	238.8	17.9
60°-70°	189.3	14.1
70°-80°	111.3	8.3
80°-90°	30.9	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°	295.0	22.0
0°-40°	518.2	38.7
0°-60°	1006.4	75.2
0°-90°	1337.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1337.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	173	173	173	173	173	
5°	168	181	204	230	239	16
15°	126	233	393	476	491	35
25°	81	264	468	488	489	37
35°	54	252	440	466	484	34
45°	37	201	389	446	466	29
55°	27	128	330	384	394	24
65°	21	68	245	276	280	21
75°	16	42	135	148	148	16
85°	6	13	33	37	37	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°	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9
2.5°	172.9	172.9	174.1	174.6	175.7	176.3	177.4	178.5	181.8	182.4	183.5
5°	168.5	170.7	178.0	180.7	188.5	199.1	203.5	210.8	225.8	230.2	233.0
7.5°	161.8	166.8	184.6	189.1	208.5	236.3	248.0	263.6	287.5	299.2	308.6
10°	151.3	161.8	193.5	204.1	235.8	278.1	299.7	321.4	357.6	373.7	379.8
12.5°	139.6	156.8	203.0	217.4	263.0	324.8	350.9	374.8	416.0	437.7	441.0
15°	126.2	149.6	211.9	233.0	292.0	363.7	392.6	422.1	460.5	476.0	479.9
17.5°	114.6	144.0	220.2	242.5	314.2	398.7	428.2	452.7	483.8	494.4	497.2
20°	100.1	135.1	225.8	254.7	337.6	424.3	452.7	471.6	492.7	499.4	500.5
22.5°	89.5	125.7	229.1	259.1	353.1	439.9	463.8	478.8	493.3	495.5	496.0
25°	80.6	115.1	228.6	264.1	366.5	449.3	467.7	478.8	487.1	488.3	488.3
27.5°	72.3	103.4	226.3	265.3	376.5	451.6	466.0	473.8	477.7	479.9	479.9
30°	65.1	92.3	220.8	263.0	380.9	449.3	461.0	464.9	468.8	472.1	473.8
32.5°	59.5	81.7	212.4	258.6	381.5	443.8	452.1	454.3	459.9	467.7	470.5
35°	54.5	71.2	203.0	252.5	378.1	434.9	440.4	442.7	453.8	465.5	469.3
37.5°	49.5	63.4	190.7	241.9	373.1	424.3	428.2	432.1	449.3	463.2	467.7
40°	44.5	56.7	176.3	230.2	365.4	411.5	414.9	421.0	443.8	459.9	464.3
42.5°	40.6	51.2	160.7	218.0	355.3	397.1	402.1	411.0	437.1	454.3	459.3
45°	37.3	45.6	144.0	201.3	342.6	382.0	389.3	401.5	429.3	446.0	450.4
47.5°	33.9	41.7	126.8	184.1	328.7	367.0	376.5	390.4	418.7	434.9	438.8
50°	31.1	37.8	109.6	165.7	313.6	350.9	362.0	376.5	405.4	420.4	425.4
52.5°	28.9	34.5	93.4	147.4	296.4	334.2	347.0	362.0	389.3	403.7	407.1
55°	26.7	31.7	79.5	127.9	278.6	316.4	330.3	344.8	371.5	383.7	385.9
57.5°	25.6	29.5	67.8	109.6	259.7	296.4	312.0	325.3	350.3	359.8	362.0
60°	23.9	27.8	58.9	94.0	239.1	277.5	290.8	304.2	325.3	333.1	334.8
62.5°	22.2	26.7	52.3	79.0	218.0	255.3	268.6	280.8	298.6	304.2	306.4
65°	21.1	25.6	47.3	67.8	196.3	231.9	245.2	255.8	270.3	275.8	276.9
67.5°	20.0	24.5	43.4	58.4	174.6	208.5	218.5	228.6	239.7	245.2	245.8
70°	18.4	23.4	40.0	51.7	152.4	181.8	190.2	200.8	209.7	212.4	214.1
72.5°	17.2	21.7	37.8	46.7	129.6	156.3	164.0	170.2	178.0	180.7	180.7
75°	15.6	19.5	35.6	41.7	106.2	127.9	134.6	140.7	146.8	147.9	146.3
77.5°	13.9	17.2	30.6	35.0	82.9	101.2	106.8	110.1	115.1	116.2	116.8
80°	11.7	15.0	23.9	27.2	60.1	74.5	78.4	81.2	85.6	85.6	86.8
82.5°	8.9	11.7	17.2	19.5	40.6	51.2	54.5	56.2	58.9	58.9	58.9
85°	5.6	7.2	11.1	12.8	24.5	31.1	33.4	33.9	36.1	36.7	36.7
87.5°	2.8	3.9	7.2	7.8	12.8	16.1	16.1	17.2	17.2	16.7	16.1
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°	172.9	172.9
2.5°	184.6	183.5
5°	237.5	238.6
7.5°	319.8	319.2
10°	397.6	402.6
12.5°	454.3	455.4
15°	488.8	491.0
17.5°	502.2	502.7
20°	502.7	501.6
22.5°	496.6	495.5
25°	489.4	488.8
27.5°	482.7	483.3
30°	479.9	481.6
32.5°	479.9	482.7
35°	481.0	483.8
37.5°	480.5	483.8
40°	478.2	482.1
42.5°	472.1	474.9
45°	462.7	466.0
47.5°	450.4	452.7
50°	434.9	437.1
52.5°	415.4	416.0
55°	392.1	394.3
57.5°	367.0	367.6
60°	339.2	340.9
62.5°	309.7	309.7
65°	278.6	279.7
67.5°	246.4	249.1
70°	213.5	214.1
72.5°	181.3	181.3
75°	147.9	148.5
77.5°	116.2	116.2
80°	86.2	86.8
82.5°	59.5	60.6
85°	37.3	37.3
87.5°	17.2	15.6
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	7.97	9.69	8.34	10.00	10.32	20.30	22.01	20.66	22.33	22.64
	3H	8.91	10.47	9.28	10.79	11.15	22.21	23.77	22.59	24.09	24.45
	4H	9.38	10.86	9.78	11.20	11.58	22.90	24.37	23.30	24.72	25.09
	6H	9.87	11.24	10.28	11.60	11.99	23.39	24.76	23.80	25.12	25.51
	8H	10.07	11.38	10.50	11.77	12.17	23.54	24.85	23.96	25.24	25.63
	12H	10.21	11.47	10.64	11.85	12.28	23.65	24.90	24.07	25.28	25.71
4H	2H	15.31	16.78	15.70	17.13	17.50	20.81	22.28	21.21	22.63	23.00
	3H	17.25	18.49	17.65	18.88	19.28	22.99	24.23	23.40	24.63	25.03
	4H	17.44	18.56	17.87	18.98	19.41	23.83	24.96	24.26	25.37	25.80
	6H	17.56	18.54	18.01	18.98	19.44	24.46	25.45	24.91	25.88	26.34
	8H	17.59	18.51	18.04	18.95	19.41	24.66	25.58	25.12	26.02	26.49
	12H	17.61	18.44	18.09	18.92	19.38	24.81	25.65	25.29	26.12	26.59
8H	4H	19.09	20.02	19.55	20.46	20.92	24.07	25.00	24.53	25.44	25.90
	6H	19.54	20.31	20.03	20.80	21.27	24.82	25.60	25.31	26.08	26.56
	8H	19.62	20.32	20.13	20.82	21.30	25.10	25.79	25.60	26.30	26.78
	12H	19.67	20.28	20.17	20.77	21.33	25.33	25.94	25.83	26.43	26.99
12H	4H	19.30	20.14	19.78	20.61	21.08	24.08	24.91	24.56	25.39	25.86
	6H	19.88	20.58	20.39	21.08	21.56	24.85	25.55	25.36	26.05	26.53
	8H	20.09	20.70	20.59	21.19	21.75	25.18	25.80	25.69	26.29	26.84

END OF REPORT