

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: P1055072

Luminaire Tested: SQ4R-FB-050D-835-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055072
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-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

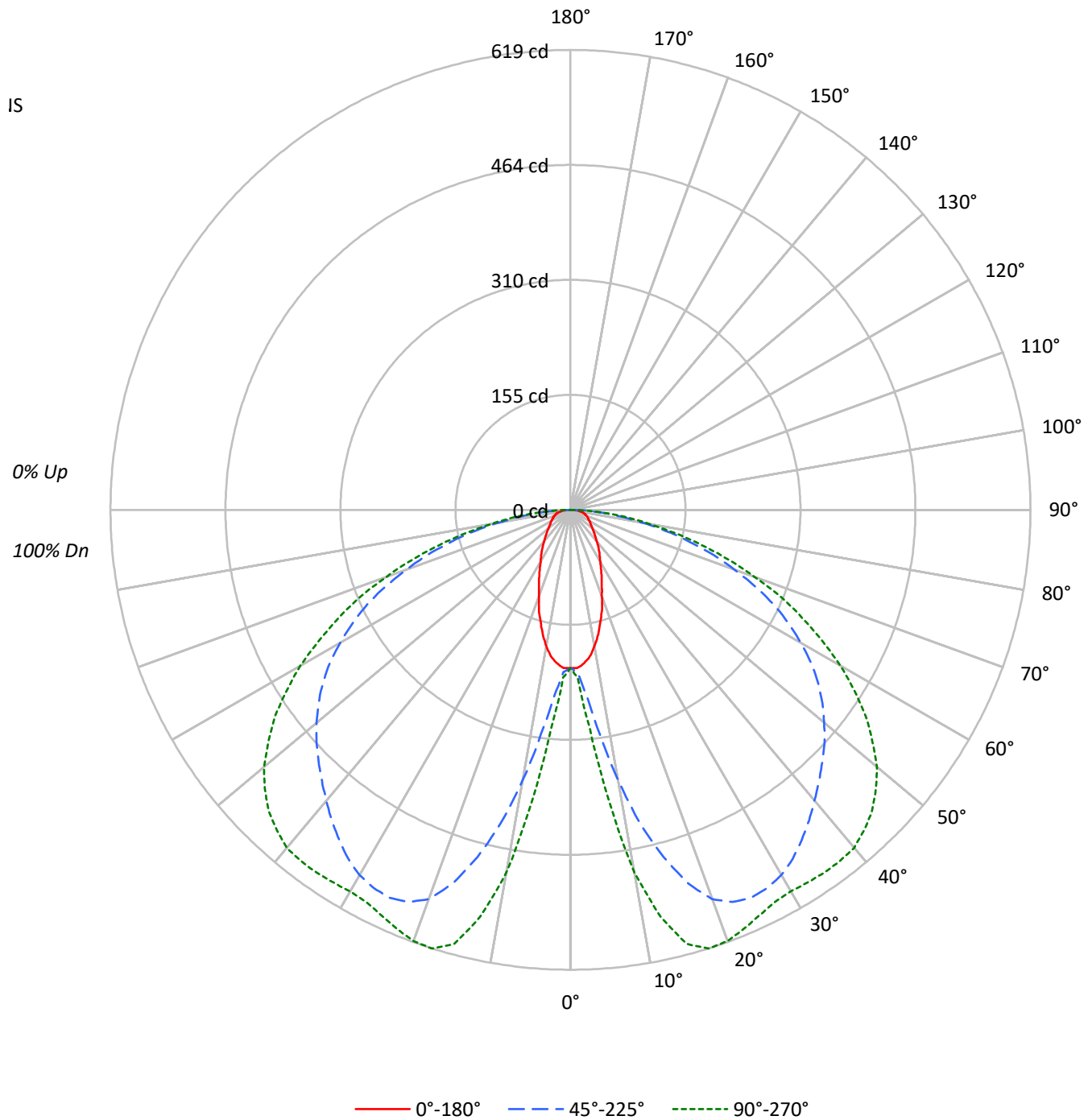
Lumens per Lamp: N/A
Luminaire Lumens: 1647.6 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2051	2051	2051
5°	2005	2422	2839
10°	1821	3608	4847
15°	1550	4819	6027
20°	1263	5712	6328
25°	1055	6118	6395
30°	890	6311	6593
35°	789	6375	7002
40°	689	6421	7463
45°	625	6527	7814
50°	575	6677	8062
55°	552	6828	8149
60°	566	6897	8083
65°	592	6880	7848
70°	636	6592	7423
75°	714	6164	6803
80°	798	5356	5921
85°	751	4540	5070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 8149 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.6	1.7
10°-20°	122.1	7.4
20°-30°	213.6	13.0
30°-40°	274.9	16.7
40°-50°	307.1	18.6
50°-60°	294.1	17.9
60°-70°	233.1	14.1
70°-80°	137.1	8.3
80°-90°	38.1	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°	363.2	22.0
0°-40°	638.2	38.7
0°-60°	1239.4	75.2
0°-90°	1647.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1647.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	208	223	251	284	294	19
15°	156	287	484	586	605	43
25°	99	325	576	601	602	46
35°	67	311	542	573	596	42
45°	46	248	479	549	574	36
55°	33	158	407	472	486	30
65°	26	84	302	340	344	26
75°	19	51	166	182	183	20
85°	7	16	41	45	46	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°	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0
2.5°	213.0	213.0	214.4	215.0	216.4	217.1	218.5	219.8	223.9	224.6	226.0
5°	207.5	210.2	219.1	222.6	232.2	245.2	250.6	259.6	278.0	283.5	286.9
7.5°	199.3	205.5	227.4	232.8	256.8	291.1	305.4	324.6	354.1	368.4	380.1
10°	186.3	199.3	238.3	251.3	290.4	342.4	369.1	395.8	440.3	460.2	467.7
12.5°	171.9	193.1	250.0	267.8	323.9	399.9	432.1	461.6	512.3	539.0	543.1
15°	155.5	184.2	260.9	286.9	359.5	447.9	483.5	519.8	567.0	586.2	591.0
17.5°	141.1	177.4	271.2	298.6	386.9	491.0	527.3	557.5	595.8	608.8	612.2
20°	123.3	166.4	278.0	313.7	415.7	522.5	557.5	580.7	606.8	615.0	616.4
22.5°	110.3	154.8	282.2	319.1	434.9	541.7	571.2	589.6	607.4	610.2	610.9
25°	99.3	141.8	281.5	325.3	451.3	553.3	575.9	589.6	599.9	601.3	601.3
27.5°	89.0	127.4	278.7	326.7	463.6	556.1	573.9	583.5	588.3	591.0	591.0
30°	80.1	113.7	271.9	323.9	469.1	553.3	567.7	572.5	577.3	581.4	583.5
32.5°	73.3	100.7	261.6	318.4	469.8	546.5	556.8	559.5	566.4	575.9	579.4
35°	67.1	87.7	250.0	310.9	465.7	535.5	542.4	545.1	558.8	573.2	578.0
37.5°	61.0	78.1	234.9	297.9	459.5	522.5	527.3	532.1	553.3	570.5	575.9
40°	54.8	69.9	217.1	283.5	449.9	506.8	510.9	518.4	546.5	566.4	571.8
42.5°	50.0	63.0	197.9	268.5	437.6	489.0	495.1	506.1	538.3	559.5	565.7
45°	45.9	56.2	177.4	247.9	421.9	470.5	479.4	494.5	528.7	549.2	554.7
47.5°	41.8	51.4	156.1	226.7	404.7	452.0	463.6	480.8	515.7	535.5	540.3
50°	38.4	46.6	134.9	204.1	386.2	432.1	445.8	463.6	499.2	517.7	523.9
52.5°	35.6	42.5	115.1	181.5	365.0	411.6	427.3	445.8	479.4	497.2	501.3
55°	32.9	39.0	97.9	157.5	343.1	389.7	406.8	424.6	457.5	472.5	475.3
57.5°	31.5	36.3	83.5	134.9	319.8	365.0	384.2	400.6	431.4	443.1	445.8
60°	29.4	34.2	72.6	115.7	294.5	341.7	358.2	374.6	400.6	410.2	412.3
62.5°	27.4	32.9	64.4	97.2	268.5	314.3	330.8	345.8	367.8	374.6	377.3
65°	26.0	31.5	58.2	83.5	241.7	285.6	302.0	315.0	332.8	339.7	341.0
67.5°	24.7	30.1	53.4	71.9	215.0	256.8	269.1	281.5	295.2	302.0	302.7
70°	22.6	28.8	49.3	63.7	187.6	223.9	234.2	247.2	258.2	261.6	263.7
72.5°	21.2	26.7	46.6	57.5	159.6	192.4	202.0	209.6	219.1	222.6	222.6
75°	19.2	24.0	43.8	51.4	130.8	157.5	165.7	173.3	180.8	182.2	180.1
77.5°	17.1	21.2	37.7	43.1	102.0	124.6	131.5	135.6	141.8	143.1	143.8
80°	14.4	18.5	29.4	33.6	74.0	91.8	96.6	100.0	105.5	105.5	106.8
82.5°	11.0	14.4	21.2	24.0	50.0	63.0	67.1	69.2	72.6	72.6	72.6
85°	6.8	8.9	13.7	15.8	30.1	38.4	41.1	41.8	44.5	45.2	45.2
87.5°	3.4	4.8	8.9	9.6	15.8	19.9	19.9	21.2	21.2	20.5	19.9
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):

	80°	90°
0°	213.0	213.0
2.5°	227.4	226.0
5°	292.4	293.8
7.5°	393.8	393.1
10°	489.7	495.8
12.5°	559.5	560.9
15°	602.0	604.7
17.5°	618.4	619.1
20°	619.1	617.7
22.5°	611.6	610.2
25°	602.7	602.0
27.5°	594.4	595.1
30°	591.0	593.1
32.5°	591.0	594.4
35°	592.4	595.8
37.5°	591.7	595.8
40°	589.0	593.8
42.5°	581.4	584.8
45°	569.8	573.9
47.5°	554.7	557.5
50°	535.5	538.3
52.5°	511.6	512.3
55°	482.8	485.5
57.5°	452.0	452.7
60°	417.7	419.8
62.5°	381.5	381.5
65°	343.1	344.5
67.5°	303.4	306.8
70°	263.0	263.7
72.5°	223.3	223.3
75°	182.2	182.9
77.5°	143.1	143.1
80°	106.1	106.8
82.5°	73.3	74.6
85°	45.9	45.9
87.5°	21.2	19.2
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	8.69	10.41	9.06	10.73	11.04	21.02	22.74	21.39	23.05	23.37
	3H	9.63	11.19	10.01	11.51	11.87	22.93	24.49	23.31	24.82	25.18
	4H	10.11	11.58	10.50	11.92	12.30	23.63	25.10	24.02	25.45	25.82
	6H	10.60	11.96	11.01	12.33	12.72	24.11	25.48	24.52	25.84	26.23
	8H	10.80	12.11	11.22	12.49	12.89	24.26	25.57	24.69	25.96	26.36
	12H	10.93	12.19	11.36	12.57	13.00	24.37	25.62	24.80	26.01	26.43
4H	2H	16.03	17.50	16.43	17.85	18.22	21.53	23.01	21.93	23.35	23.73
	3H	17.97	19.21	18.38	19.61	20.00	23.72	24.96	24.12	25.35	25.75
	4H	18.16	19.29	18.59	19.70	20.13	24.56	25.68	24.99	26.09	26.53
	6H	18.28	19.27	18.73	19.71	20.16	25.18	26.17	25.63	26.61	27.06
	8H	18.31	19.23	18.77	19.67	20.14	25.38	26.31	25.84	26.75	27.21
	12H	18.33	19.17	18.81	19.64	20.11	25.53	26.37	26.01	26.84	27.31
8H	4H	19.81	20.74	20.27	21.18	21.64	24.80	25.72	25.25	26.16	26.62
	6H	20.26	21.04	20.75	21.52	21.99	25.55	26.32	26.04	26.81	27.28
	8H	20.35	21.04	20.85	21.54	22.03	25.82	26.52	26.33	27.02	27.50
	12H	20.39	21.00	20.89	21.49	22.05	26.05	26.66	26.55	27.15	27.71
12H	4H	20.03	20.86	20.50	21.33	21.80	24.80	25.64	25.28	26.11	26.58
	6H	20.60	21.30	21.11	21.80	22.29	25.57	26.27	26.08	26.77	27.26
	8H	20.81	21.43	21.32	21.92	22.47	25.91	26.52	26.41	27.01	27.57

END OF REPORT