

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: P1055076

Luminaire Tested: SQ4R-FB-050D-935-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055076
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-935-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

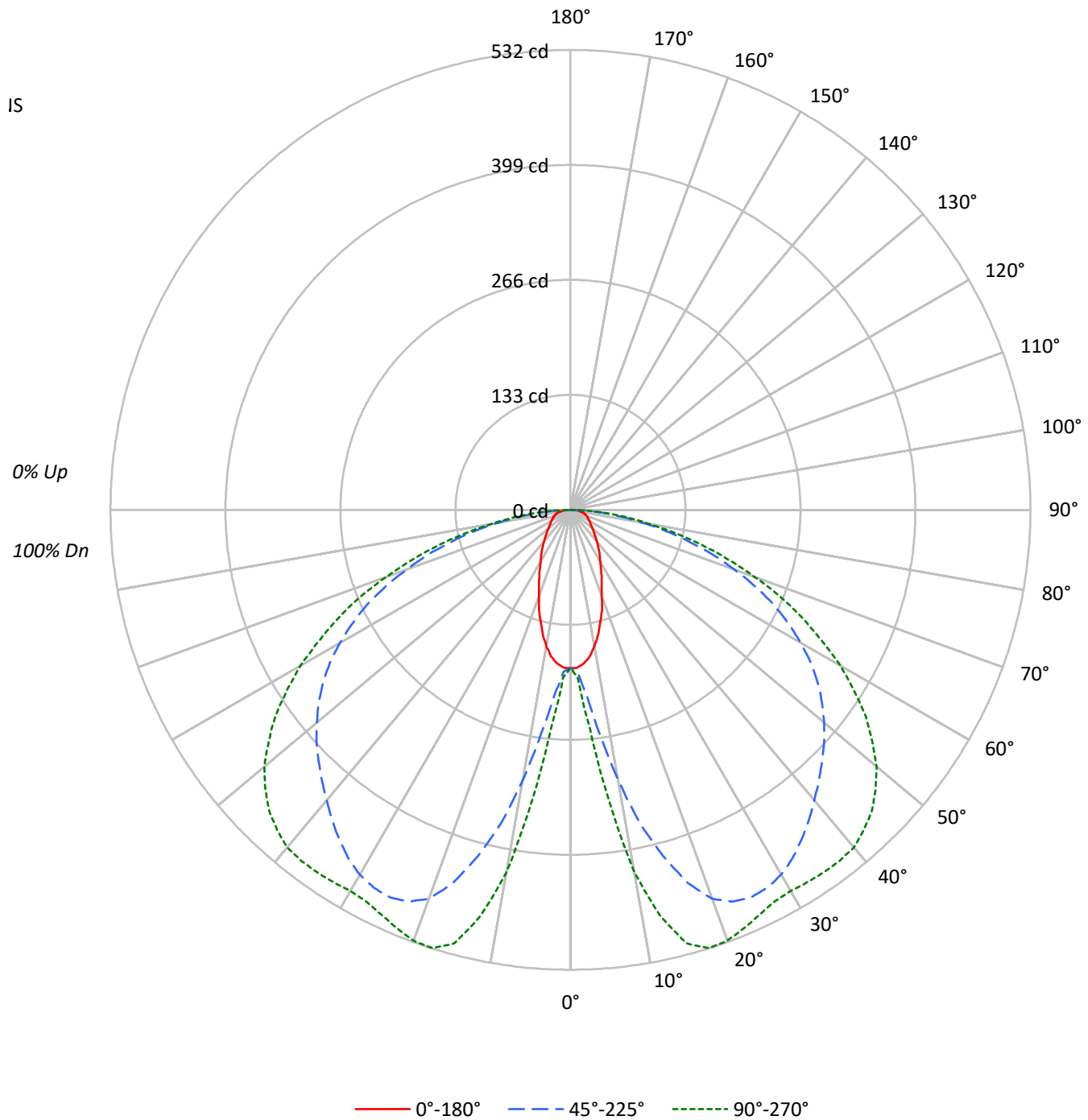
Lumens per Lamp: N/A
Luminaire Lumens: 1414.6 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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		0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111			106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	90			92	89	87		89
2	97	89	81	75	95	87	80	74	83	77	72			80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	60			69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50			61	54	49		59
5	73	60	50	43	71	59	50	43	56	48	42			54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	37			49	42	36		47
7	62	48	39	32	60	47	38	32	46	38	32			44	37	32		43
8	58	43	35	28	56	43	34	28	41	34	28			40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25			37	30	25		36
10	50	36	28	23	49	36	28	23	35	27	22			34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1761	1761	1761
5°	1722	2080	2437
10°	1563	3098	4162
15°	1331	4137	5175
20°	1084	4903	5434
25°	906	5253	5490
30°	765	5418	5661
35°	677	5473	6012
40°	591	5512	6407
45°	536	5604	6708
50°	493	5733	6923
55°	473	5863	6998
60°	487	5921	6939
65°	508	5907	6738
70°	546	5661	6373
75°	614	5293	5840
80°	682	4596	5084
85°	652	3899	4352

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 6998 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	1.7
10°-20°	104.8	7.4
20°-30°	183.4	13.0
30°-40°	236.1	16.7
40°-50°	263.7	18.6
50°-60°	252.5	17.9
60°-70°	200.1	14.1
70°-80°	117.7	8.3
80°-90°	32.7	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°	311.9	22.0
0°-40°	547.9	38.7
0°-60°	1064.1	75.2
0°-90°	1414.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1414.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	183	183	183	183	183	
5°	178	191	215	243	252	16
15°	134	246	415	503	519	37
25°	85	279	494	516	517	39
35°	58	267	466	492	512	36
45°	39	213	412	472	493	30
55°	28	135	349	406	417	26
65°	22	72	259	292	296	22
75°	16	44	142	156	157	17
85°	6	14	35	39	39	7
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°	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9
2.5°	182.9	182.9	184.0	184.6	185.8	186.4	187.6	188.7	192.3	192.9	194.0
5°	178.2	180.5	188.2	191.1	199.3	210.5	215.2	222.8	238.7	243.4	246.4
7.5°	171.1	176.4	195.2	199.9	220.5	249.9	262.2	278.7	304.0	316.3	326.3
10°	159.9	171.1	204.6	215.8	249.3	294.0	316.9	339.9	378.1	395.1	401.6
12.5°	147.6	165.8	214.6	229.9	278.1	343.4	371.0	396.3	439.8	462.7	466.3
15°	133.5	158.2	224.0	246.4	308.7	384.5	415.1	446.3	486.9	503.3	507.4
17.5°	121.1	152.3	232.8	256.4	332.2	421.6	452.7	478.6	511.5	522.7	525.7
20°	105.8	142.9	238.7	269.3	356.9	448.6	478.6	498.6	521.0	528.0	529.2
22.5°	94.7	132.9	242.2	274.0	373.4	465.1	490.4	506.3	521.5	523.9	524.5
25°	85.3	121.7	241.7	279.3	387.5	475.1	494.5	506.3	515.1	516.2	516.2
27.5°	76.4	109.4	239.3	280.5	398.1	477.4	492.7	501.0	505.1	507.4	507.4
30°	68.8	97.6	233.4	278.1	402.8	475.1	487.4	491.6	495.7	499.2	501.0
32.5°	62.9	86.4	224.6	273.4	403.4	469.2	478.0	480.4	486.3	494.5	497.4
35°	57.6	75.3	214.6	266.9	399.8	459.8	465.7	468.0	479.8	492.1	496.3
37.5°	52.3	67.0	201.7	255.8	394.5	448.6	452.7	456.9	475.1	489.8	494.5
40°	47.0	60.0	186.4	243.4	386.3	435.1	438.6	445.1	469.2	486.3	491.0
42.5°	42.9	54.1	169.9	230.5	375.7	419.8	425.1	434.5	462.2	480.4	485.7
45°	39.4	48.2	152.3	212.8	362.2	403.9	411.6	424.5	453.9	471.6	476.3
47.5°	35.9	44.1	134.1	194.6	347.5	388.1	398.1	412.8	442.8	459.8	463.9
50°	32.9	40.0	115.8	175.2	331.6	371.0	382.8	398.1	428.6	444.5	449.8
52.5°	30.6	36.5	98.8	155.8	313.4	353.4	366.9	382.8	411.6	426.9	430.4
55°	28.2	33.5	84.1	135.2	294.6	334.6	349.3	364.5	392.8	405.7	408.1
57.5°	27.0	31.2	71.7	115.8	274.6	313.4	329.9	344.0	370.4	380.4	382.8
60°	25.3	29.4	62.3	99.4	252.8	293.4	307.5	321.6	344.0	352.2	354.0
62.5°	23.5	28.2	55.3	83.5	230.5	269.9	284.0	296.9	315.7	321.6	324.0
65°	22.3	27.0	50.0	71.7	207.6	245.2	259.3	270.5	285.8	291.6	292.8
67.5°	21.2	25.9	45.9	61.7	184.6	220.5	231.1	241.7	253.4	259.3	259.9
70°	19.4	24.7	42.3	54.7	161.1	192.3	201.1	212.3	221.7	224.6	226.4
72.5°	18.2	22.9	40.0	49.4	137.0	165.2	173.5	179.9	188.2	191.1	191.1
75°	16.5	20.6	37.6	44.1	112.3	135.2	142.3	148.8	155.2	156.4	154.6
77.5°	14.7	18.2	32.3	37.0	87.6	107.0	112.9	116.4	121.7	122.9	123.5
80°	12.3	15.9	25.3	28.8	63.5	78.8	82.9	85.8	90.5	90.5	91.7
82.5°	9.4	12.3	18.2	20.6	42.9	54.1	57.6	59.4	62.3	62.3	62.3
85°	5.9	7.6	11.8	13.5	25.9	32.9	35.3	35.9	38.2	38.8	38.8
87.5°	2.9	4.1	7.6	8.2	13.5	17.1	17.1	18.2	18.2	17.6	17.1
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°	182.9	182.9
2.5°	195.2	194.0
5°	251.1	252.2
7.5°	338.1	337.5
10°	420.4	425.7
12.5°	480.4	481.6
15°	516.8	519.2
17.5°	530.9	531.5
20°	531.5	530.4
22.5°	525.1	523.9
25°	517.4	516.8
27.5°	510.4	511.0
30°	507.4	509.2
32.5°	507.4	510.4
35°	508.6	511.5
37.5°	508.0	511.5
40°	505.7	509.8
42.5°	499.2	502.1
45°	489.2	492.7
47.5°	476.3	478.6
50°	459.8	462.2
52.5°	439.2	439.8
55°	414.5	416.9
57.5°	388.1	388.7
60°	358.7	360.4
62.5°	327.5	327.5
65°	294.6	295.8
67.5°	260.5	263.4
70°	225.8	226.4
72.5°	191.7	191.7
75°	156.4	157.0
77.5°	122.9	122.9
80°	91.1	91.7
82.5°	62.9	64.1
85°	39.4	39.4
87.5°	18.2	16.5
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	8.17	9.88	8.53	10.20	10.51	20.49	22.21	20.86	22.52	22.84
	3H	9.10	10.66	9.48	10.99	11.35	22.40	23.96	22.78	24.29	24.65
	4H	9.58	11.05	9.97	11.40	11.77	23.10	24.57	23.49	24.92	25.29
	6H	10.07	11.43	10.48	11.80	12.19	23.58	24.95	23.99	25.31	25.70
	8H	10.27	11.57	10.69	11.96	12.36	23.73	25.04	24.16	25.43	25.83
	12H	10.40	11.66	10.83	12.04	12.47	23.84	25.09	24.27	25.48	25.90
4H	2H	15.50	16.97	15.90	17.32	17.69	21.00	22.48	21.40	22.82	23.20
	3H	17.44	18.68	17.85	19.08	19.47	23.19	24.43	23.60	24.82	25.22
	4H	17.63	18.76	18.06	19.17	19.60	24.03	25.15	24.46	25.56	26.00
	6H	17.75	18.74	18.20	19.18	19.63	24.65	25.64	25.10	26.08	26.53
	8H	17.78	18.70	18.24	19.14	19.61	24.85	25.78	25.31	26.22	26.68
	12H	17.80	18.64	18.28	19.11	19.58	25.00	25.84	25.48	26.31	26.78
8H	4H	19.29	20.21	19.74	20.65	21.11	24.27	25.19	24.72	25.63	26.09
	6H	19.73	20.51	20.22	20.99	21.46	25.02	25.79	25.51	26.28	26.75
	8H	19.82	20.51	20.32	21.01	21.50	25.29	25.99	25.80	26.49	26.97
	12H	19.86	20.47	20.36	20.96	21.52	25.52	26.13	26.02	26.62	27.18
12H	4H	19.50	20.33	19.97	20.80	21.27	24.27	25.11	24.75	25.58	26.05
	6H	20.07	20.77	20.58	21.27	21.76	25.04	25.74	25.55	26.24	26.73
	8H	20.28	20.90	20.79	21.39	21.94	25.38	25.99	25.88	26.48	27.04