

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: P1055091

Luminaire Tested: SQ4R-FB-100D-940-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055091
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-100D-940-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

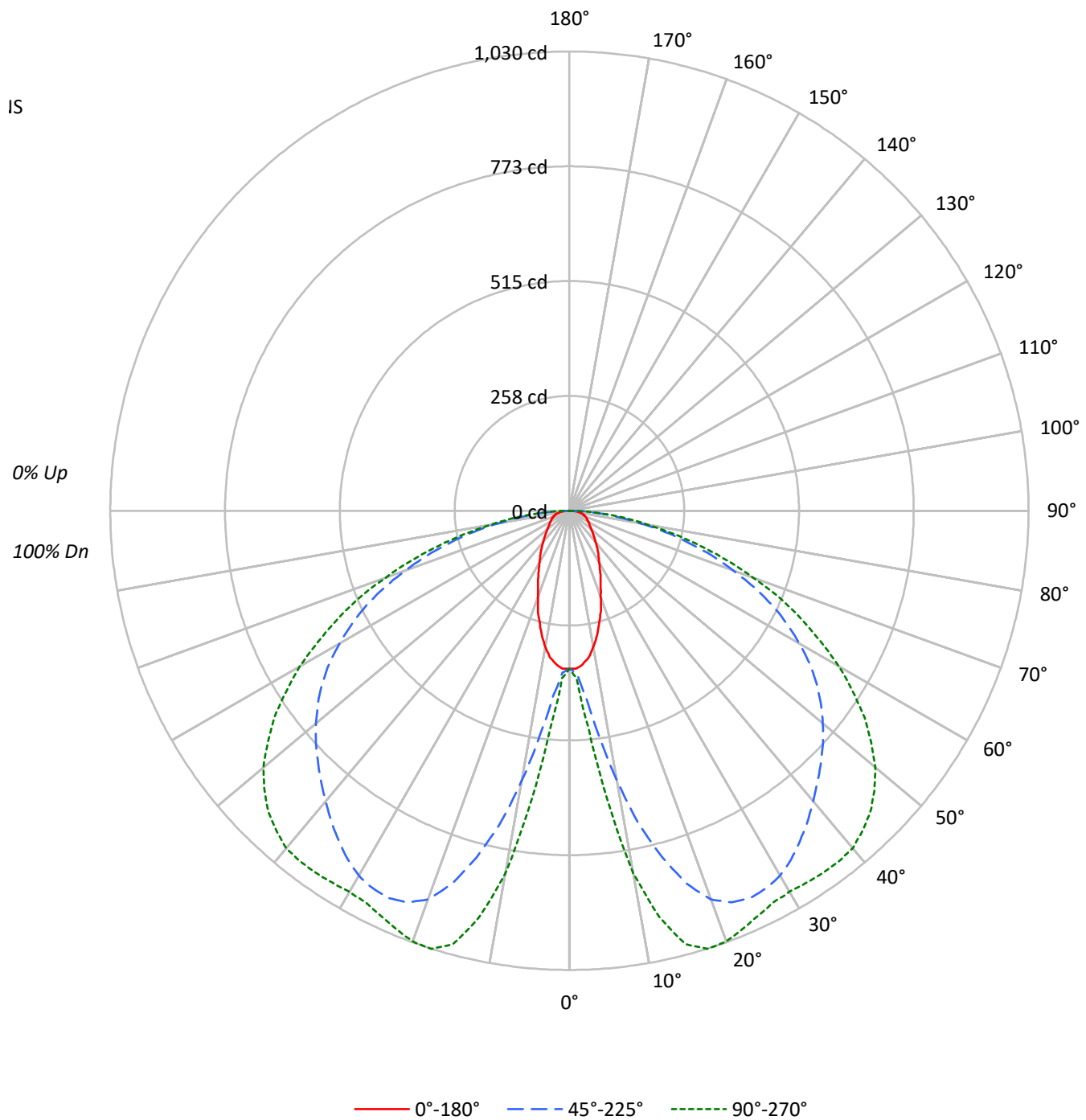
Lumens per Lamp: N/A
Luminaire Lumens: 2742.2 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 37
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°	3413	3413	3413
5°	3338	4032	4726
10°	3031	6005	8067
15°	2578	8020	10031
20°	2102	9506	10533
25°	1756	10183	10643
30°	1483	10504	10973
35°	1313	10609	11654
40°	1146	10686	12419
45°	1040	10862	13004
50°	956	11113	13418
55°	918	11363	13564
60°	943	11478	13453
65°	986	11449	13060
70°	1058	10972	12352
75°	1187	10259	11319
80°	1325	8909	9858
85°	1259	7556	8439

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 13564 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.9	1.7
10°-20°	203.2	7.4
20°-30°	355.5	13.0
30°-40°	457.6	16.7
40°-50°	511.1	18.6
50°-60°	489.5	17.9
60°-70°	387.9	14.1
70°-80°	228.1	8.3
80°-90°	63.4	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°	604.5	22.0
0°-40°	1062.1	38.7
0°-60°	2062.7	75.2
0°-90°	2742.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2742.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	354	354	354	354	354	
5°	345	370	417	472	489	32
15°	259	478	805	976	1006	72
25°	165	541	959	1001	1002	76
35°	112	518	903	954	992	70
45°	76	413	798	914	955	59
55°	55	262	677	786	808	50
65°	43	139	503	565	573	43
75°	32	86	276	303	304	33
85°	11	26	68	75	76	13
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°	354.5	354.5	354.5	354.5	354.5	354.5	354.5	354.5	354.5	354.5	354.5
2.5°	354.5	354.5	356.8	357.9	360.2	361.3	363.6	365.9	372.7	373.8	376.1
5°	345.4	349.9	364.7	370.4	386.4	408.0	417.2	432.0	462.8	471.9	477.6
7.5°	331.7	341.9	378.4	387.5	427.4	484.4	508.3	540.3	589.3	613.2	632.6
10°	310.0	331.7	396.6	418.3	483.3	569.9	614.3	658.8	732.9	765.9	778.5
12.5°	286.1	321.4	416.0	445.7	539.1	665.6	719.2	768.2	852.6	897.0	903.8
15°	258.7	306.6	434.3	477.6	598.4	745.4	804.7	865.1	943.7	975.7	983.6
17.5°	234.8	295.2	451.4	496.9	644.0	817.2	877.6	927.8	991.6	1013.3	1019.0
20°	205.2	277.0	462.8	522.0	691.8	869.7	927.8	966.5	1009.8	1023.5	1025.8
22.5°	183.5	257.6	469.6	531.1	723.8	901.6	950.6	981.4	1011.0	1015.5	1016.7
25°	165.3	235.9	468.4	541.4	751.1	920.9	958.6	981.4	998.4	1000.7	1000.7
27.5°	148.2	212.0	463.9	543.7	771.6	925.5	955.1	971.1	979.1	983.6	983.6
30°	133.4	189.2	452.5	539.1	780.7	920.9	944.9	952.9	960.8	967.7	971.1
32.5°	122.0	167.5	435.4	530.0	781.9	909.5	926.6	931.2	942.6	958.6	964.3
35°	111.7	145.9	416.0	517.5	775.1	891.3	902.7	907.3	930.1	954.0	962.0
37.5°	101.4	129.9	390.9	495.8	764.8	869.7	877.6	885.6	920.9	949.4	958.6
40°	91.2	116.3	361.3	471.9	748.8	843.4	850.3	862.8	909.5	942.6	951.7
42.5°	83.2	104.9	329.4	446.8	728.3	813.8	824.1	842.3	895.9	931.2	941.5
45°	76.4	93.5	295.2	412.6	702.1	783.0	797.8	822.9	879.9	914.1	923.2
47.5°	69.5	85.5	259.9	377.3	673.6	752.3	771.6	800.1	858.3	891.3	899.3
50°	63.8	77.5	224.5	339.7	642.8	719.2	742.0	771.6	830.9	861.7	871.9
52.5°	59.3	70.7	191.5	302.0	607.5	685.0	711.2	742.0	797.8	827.5	834.3
55°	54.7	65.0	163.0	262.1	571.0	648.5	677.0	706.7	761.4	786.4	791.0
57.5°	52.4	60.4	139.1	224.5	532.3	607.5	639.4	666.8	718.1	737.4	742.0
60°	49.0	57.0	120.8	192.6	490.1	568.8	596.1	623.5	666.8	682.7	686.1
62.5°	45.6	54.7	107.1	161.8	446.8	523.2	550.5	575.6	612.1	623.5	628.0
65°	43.3	52.4	96.9	139.1	402.3	475.3	502.6	524.3	553.9	565.3	567.6
67.5°	41.0	50.2	88.9	119.7	357.9	427.4	447.9	468.4	491.2	502.6	503.8
70°	37.6	47.9	82.1	106.0	312.3	372.7	389.8	411.5	429.7	435.4	438.8
72.5°	35.3	44.5	77.5	95.7	265.6	320.3	336.2	348.8	364.7	370.4	370.4
75°	31.9	39.9	72.9	85.5	217.7	262.1	275.8	288.4	300.9	303.2	299.8
77.5°	28.5	35.3	62.7	71.8	169.8	207.4	218.8	225.7	235.9	238.2	239.4
80°	23.9	30.8	49.0	55.8	123.1	152.7	160.7	166.4	175.5	175.5	177.8
82.5°	18.2	23.9	35.3	39.9	83.2	104.9	111.7	115.1	120.8	120.8	120.8
85°	11.4	14.8	22.8	26.2	50.2	63.8	68.4	69.5	74.1	75.2	75.2
87.5°	5.7	8.0	14.8	16.0	26.2	33.1	33.1	35.3	35.3	34.2	33.1
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°	354.5	354.5
2.5°	378.4	376.1
5°	486.7	489.0
7.5°	655.4	654.2
10°	814.9	825.2
12.5°	931.2	933.5
15°	1001.9	1006.4
17.5°	1029.2	1030.4
20°	1030.4	1028.1
22.5°	1017.8	1015.5
25°	1003.0	1001.9
27.5°	989.3	990.5
30°	983.6	987.1
32.5°	983.6	989.3
35°	985.9	991.6
37.5°	984.8	991.6
40°	980.2	988.2
42.5°	967.7	973.4
45°	948.3	955.1
47.5°	923.2	927.8
50°	891.3	895.9
52.5°	851.4	852.6
55°	803.5	808.1
57.5°	752.3	753.4
60°	695.3	698.7
62.5°	634.9	634.9
65°	571.0	573.3
67.5°	504.9	510.6
70°	437.7	438.8
72.5°	371.6	371.6
75°	303.2	304.3
77.5°	238.2	238.2
80°	176.7	177.8
82.5°	122.0	124.2
85°	76.4	76.4
87.5°	35.3	31.9
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	10.47	12.19	10.83	12.50	12.81	22.79	24.51	23.16	24.82	25.14
	3H	11.41	12.96	11.78	13.29	13.65	24.70	26.26	25.08	26.59	26.95
	4H	11.88	13.35	12.28	13.70	14.07	25.40	26.87	25.79	27.21	27.59
	6H	12.37	13.74	12.78	14.10	14.49	25.88	27.25	26.29	27.61	28.00
	8H	12.57	13.88	12.99	14.27	14.66	26.03	27.34	26.46	27.73	28.13
	12H	12.71	13.96	13.14	14.34	14.77	26.14	27.39	26.57	27.78	28.20
4H	2H	17.80	19.27	18.20	19.62	19.99	23.30	24.78	23.70	25.12	25.50
	3H	19.74	20.98	20.15	21.38	21.77	25.49	26.73	25.89	27.12	27.52
	4H	19.93	21.06	20.36	21.47	21.90	26.33	27.45	26.76	27.86	28.30
	6H	20.05	21.04	20.50	21.48	21.93	26.95	27.94	27.40	28.38	28.83
	8H	20.08	21.00	20.54	21.44	21.91	27.15	28.08	27.61	28.52	28.98
	12H	20.10	20.94	20.58	21.41	21.88	27.30	28.14	27.78	28.61	29.08
8H	4H	21.58	22.51	22.04	22.95	23.41	26.57	27.49	27.02	27.93	28.39
	6H	22.03	22.80	22.52	23.29	23.76	27.32	28.09	27.81	28.58	29.05
	8H	22.12	22.81	22.62	23.31	23.80	27.59	28.29	28.10	28.79	29.27
	12H	22.16	22.77	22.66	23.26	23.82	27.82	28.43	28.32	28.92	29.48
12H	4H	21.80	22.63	22.27	23.10	23.57	26.57	27.41	27.05	27.88	28.35
	6H	22.37	23.07	22.88	23.57	24.06	27.34	28.04	27.85	28.54	29.03
	8H	22.58	23.20	23.09	23.69	24.24	27.68	28.29	28.18	28.78	29.34

END OF REPORT