

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: P1055025

Luminaire Tested: SQ4R-F-100D-927-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055025
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-100D-927-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

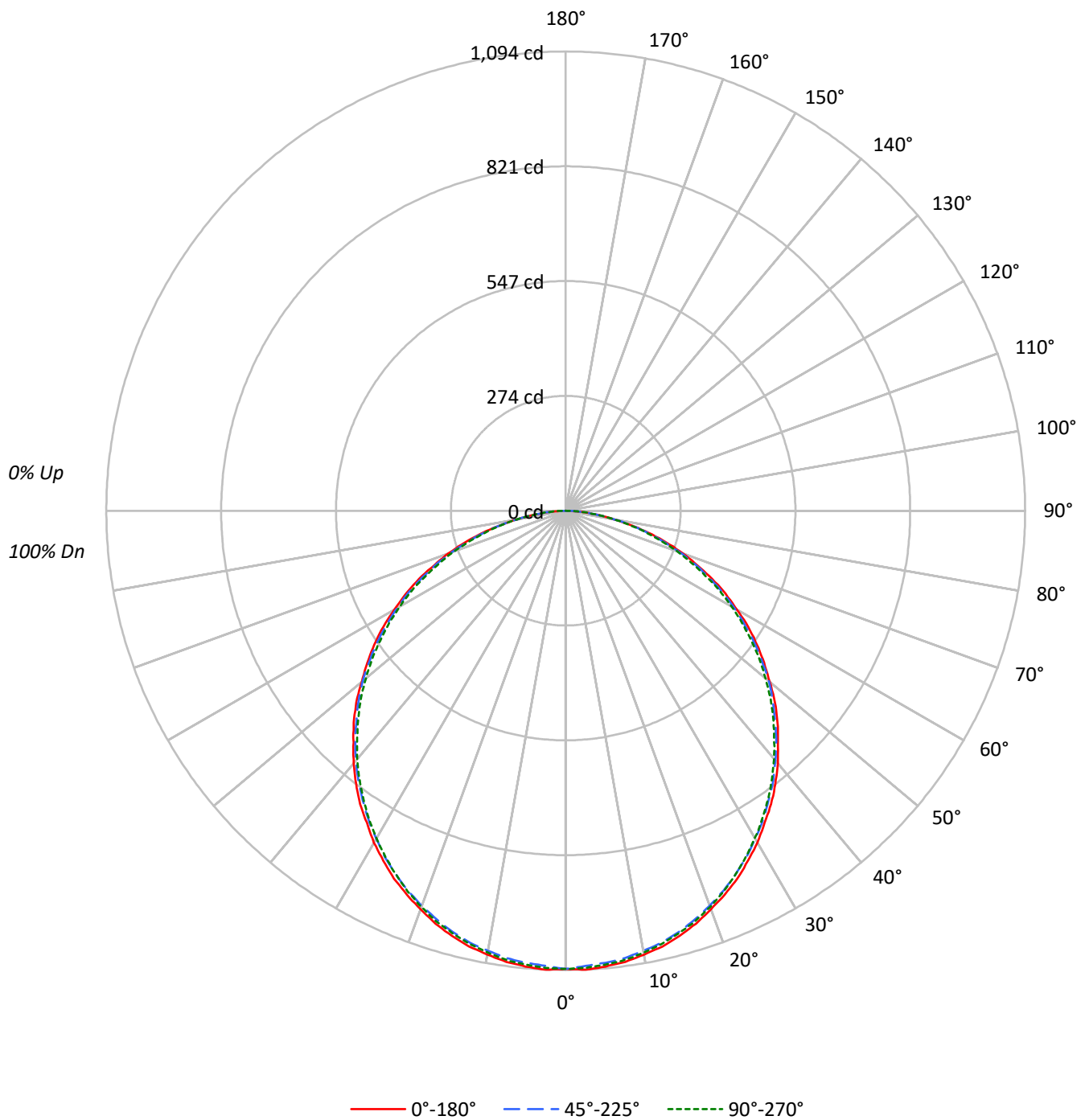
Lumens per Lamp: N/A
Luminaire Lumens: 3042.3 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1055025

CATALOG NUMBER: SQ4R-F-100D-927-1-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P1055025

CATALOG NUMBER: SQ4R-F-100D-927-1-UNV-STD-W-4

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	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10507	10507	10507
5°	10533	10447	10489
10°	10494	10406	10450
15°	10445	10356	10386
20°	10353	10261	10291
25°	10272	10161	10161
30°	10150	10033	10016
35°	10026	9903	9868
40°	9873	9760	9703
45°	9716	9593	9512
50°	9499	9454	9297
55°	9336	9210	9059
60°	9065	8921	8776
65°	8777	8572	8367
70°	8354	8104	7935
75°	7585	7417	7250
80°	6481	6481	6398
85°	4639	4971	4971

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 9716 cd/sqm

TEST NUMBER: P1055025

CATALOG NUMBER: SQ4R-F-100D-927-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	3.4
10°-20°	294.4	9.7
20°-30°	442.5	14.5
30°-40°	528.8	17.4
40°-50°	544.9	17.9
50°-60°	490.3	16.1
60°-70°	372.7	12.3
70°-80°	211.9	7.0
80°-90°	53.6	1.8
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°	840.1	27.6
0°-40°	1368.9	45.0
0°-60°	2404.1	79.0
0°-90°	3042.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3042.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1090	1088	1081	1090	1085	104
15°	1048	1046	1039	1045	1042	296
25°	967	964	956	960	956	445
35°	853	850	843	843	840	533
45°	714	714	705	700	699	550
55°	556	555	549	544	540	496
65°	385	384	376	372	367	380
75°	204	202	199	198	195	217
85°	42	44	45	45	45	52
90°	0	0	0	0	0	

TEST NUMBER: P1055025

CATALOG NUMBER: SQ4R-F-100D-927-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1091.4	1091.4	1091.4	1091.4	1091.4
2.5°	1094.4	1091.4	1085.4	1092.9	1089.9
5°	1089.9	1088.4	1081.0	1089.9	1085.4
7.5°	1083.9	1082.5	1075.0	1082.5	1079.5
10°	1073.5	1072.0	1064.5	1072.0	1069.0
12.5°	1063.0	1061.5	1054.0	1060.0	1057.0
15°	1048.0	1046.5	1039.0	1045.0	1042.0
17.5°	1031.5	1030.0	1021.0	1027.0	1025.5
20°	1010.5	1009.0	1001.5	1006.0	1004.5
22.5°	989.5	988.0	980.5	985.0	982.0
25°	967.0	964.0	956.5	959.5	956.5
27.5°	940.0	938.5	931.0	932.5	929.5
30°	913.0	911.5	902.5	904.0	901.0
32.5°	881.6	881.6	874.1	874.1	871.1
35°	853.1	850.1	842.6	842.6	839.6
37.5°	820.1	817.1	811.1	809.6	806.6
40°	785.6	784.1	776.6	775.1	772.1
42.5°	748.1	749.6	742.1	737.6	734.6
45°	713.6	713.6	704.6	700.1	698.6
47.5°	676.2	676.2	668.7	664.2	661.2
50°	634.2	637.2	631.2	623.7	620.7
52.5°	595.2	596.7	589.2	584.7	581.7
55°	556.2	554.7	548.7	544.2	539.7
57.5°	515.7	514.2	505.2	500.7	497.7
60°	470.8	470.8	463.3	458.8	455.8
62.5°	428.8	427.3	421.3	415.3	413.8
65°	385.3	383.8	376.3	371.8	367.3
67.5°	338.8	337.3	332.8	326.8	323.8
70°	296.8	292.4	287.9	283.4	281.9
72.5°	251.9	247.4	242.9	239.9	236.9
75°	203.9	202.4	199.4	197.9	194.9
77.5°	160.4	160.4	157.4	155.9	155.9
80°	116.9	116.9	116.9	115.4	115.4
82.5°	76.5	78.0	78.0	76.5	78.0
85°	42.0	43.5	45.0	45.0	45.0
87.5°	13.5	18.0	16.5	18.0	18.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1055025

CATALOG NUMBER: SQ4R-F-100D-927-1-UNV-STD-W-4

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	19.97	21.61	20.33	21.92	22.23	19.77	21.41	20.14	21.72	22.04
	3H	21.78	23.27	22.16	23.59	23.95	21.55	23.04	21.93	23.36	23.72
	4H	22.45	23.85	22.85	24.19	24.57	22.21	23.61	22.61	23.95	24.33
	6H	22.92	24.21	23.33	24.57	24.97	22.69	23.98	23.10	24.34	24.74
	8H	23.04	24.28	23.47	24.67	25.07	22.83	24.06	23.25	24.45	24.85
	12H	23.11	24.30	23.54	24.68	25.11	22.91	24.09	23.34	24.48	24.90
4H	2H	20.58	21.98	20.98	22.33	22.70	20.43	21.82	20.83	22.17	22.55
	3H	22.62	23.79	23.03	24.18	24.58	22.43	23.60	22.84	24.00	24.40
	4H	23.41	24.47	23.84	24.88	25.32	23.21	24.27	23.64	24.68	25.12
	6H	24.00	24.92	24.45	25.36	25.82	23.81	24.73	24.26	25.17	25.63
	8H	24.17	25.03	24.63	25.48	25.94	23.99	24.85	24.45	25.29	25.76
	12H	24.27	25.05	24.75	25.53	25.99	24.11	24.89	24.59	25.36	25.83
8H	4H	23.71	24.57	24.16	25.01	25.48	23.53	24.39	23.99	24.84	25.30
	6H	24.40	25.12	24.90	25.61	26.09	24.23	24.96	24.73	25.44	25.92
	8H	24.64	25.28	25.14	25.79	26.27	24.48	25.12	24.99	25.63	26.11
	12H	24.80	25.37	25.30	25.86	26.42	24.66	25.23	25.17	25.72	26.28
12H	4H	23.73	24.51	24.21	24.99	25.46	23.56	24.34	24.04	24.81	25.28
	6H	24.45	25.10	24.96	25.60	26.09	24.29	24.93	24.79	25.44	25.92
	8H	24.73	25.30	25.24	25.79	26.35	24.58	25.15	25.09	25.64	26.20