

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: P1055139

Luminaire Tested: SQ4R-PW1-100D-927-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055139
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-100D-927-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

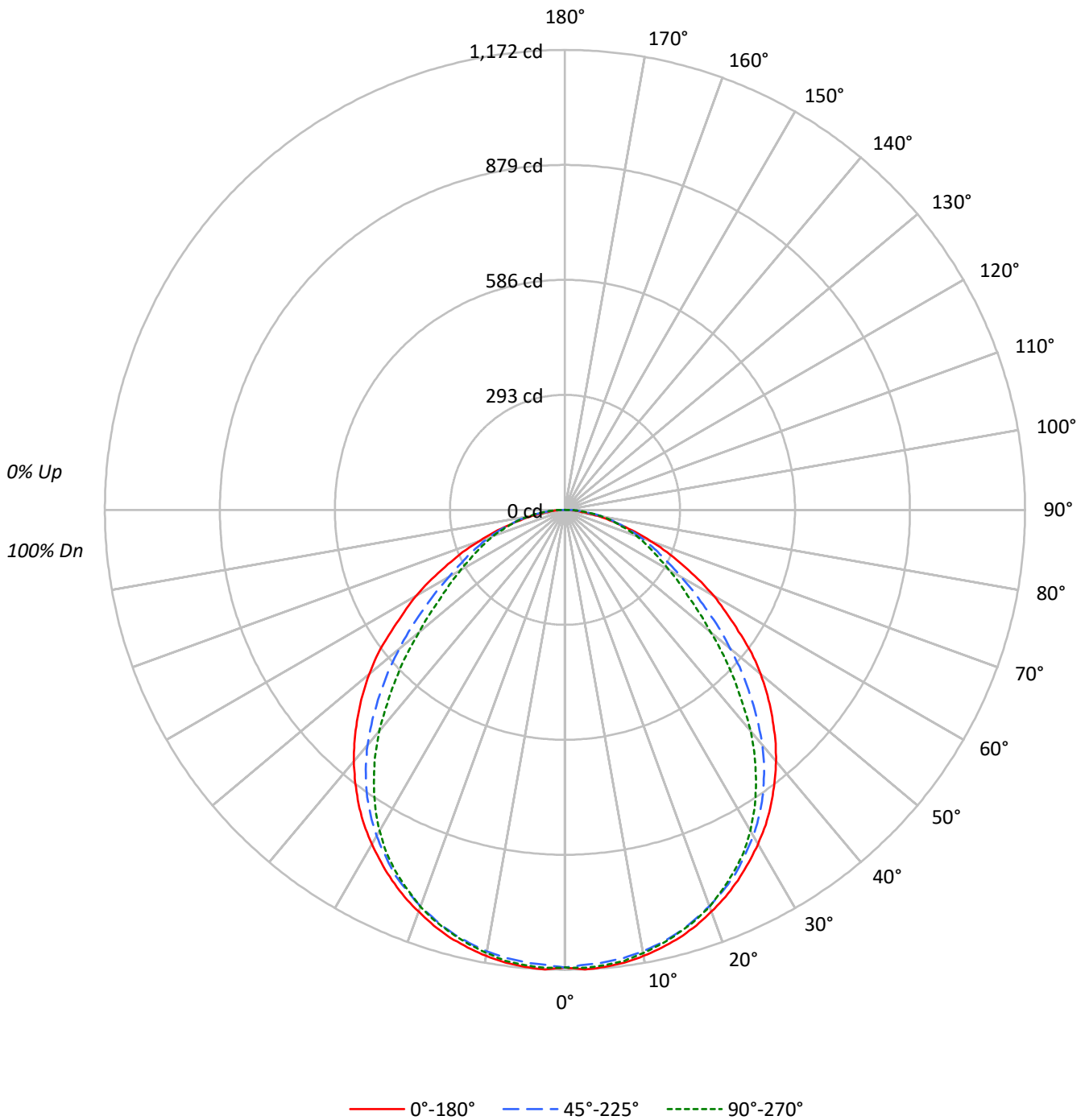
Lumens per Lamp: N/A
Luminaire Lumens: 2849.9 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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	0
RW	70	50	30	10	70	50	30	10	50	30	10	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	102	102	100			100	
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85			85	
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72			72	
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62			62	
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54			54	
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47			47	
6	72	59	51	45	70	59	50	44	57	49	44	55	49	44	54	48	43	41			41	
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37			37	
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33			33	
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30			30	
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27			27	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11229	11229	11229
5°	11301	11185	11258
10°	11285	11168	11212
15°	11252	11117	11132
20°	11166	11014	11029
25°	11069	10893	10814
30°	10933	10666	10500
35°	10766	10344	9973
40°	10514	9835	9251
45°	10165	9084	8288
50°	9746	8241	7254
55°	9059	7323	6417
60°	8430	6552	5888
65°	7479	6080	5567
70°	6499	5782	5486
75°	5353	5464	5241
80°	4241	5156	5156
85°	3148	4639	4805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10165 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	3.9
10°-20°	316.1	11.1
20°-30°	473.5	16.6
30°-40°	550.1	19.3
40°-50°	519.0	18.2
50°-60°	404.9	14.2
60°-70°	274.9	9.6
70°-80°	154.8	5.4
80°-90°	46.0	1.6
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°	900.2	31.6
0°-40°	1450.3	50.9
0°-60°	2374.3	83.3
0°-90°	2849.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2849.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1166	1166	1166	1166	1166	
5°	1169	1166	1157	1166	1165	111
15°	1129	1124	1115	1121	1117	318
25°	1042	1038	1026	1022	1018	480
35°	916	907	880	861	849	572
45°	747	724	667	625	609	576
55°	540	508	436	394	382	485
65°	328	298	267	250	244	328
75°	144	150	147	141	141	157
85°	28	40	42	42	44	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1166.4	1166.4	1166.4	1166.4	1166.4
2.5°	1172.4	1169.4	1160.4	1169.4	1167.9
5°	1169.4	1166.4	1157.4	1166.4	1164.9
7.5°	1163.4	1161.9	1151.4	1160.4	1158.9
10°	1154.4	1152.9	1142.4	1149.9	1146.9
12.5°	1142.4	1140.9	1130.4	1136.4	1133.4
15°	1128.9	1124.4	1115.4	1121.4	1116.9
17.5°	1110.9	1106.4	1095.9	1100.4	1098.9
20°	1089.9	1085.4	1075.0	1079.4	1076.5
22.5°	1067.5	1063.0	1051.0	1052.5	1048.0
25°	1042.0	1037.5	1025.5	1022.5	1018.0
27.5°	1013.5	1010.5	992.5	989.5	985.0
30°	983.5	979.0	959.5	953.5	944.5
32.5°	952.0	943.0	922.0	910.0	899.5
35°	916.0	907.0	880.1	860.6	848.6
37.5°	877.1	863.6	833.6	806.6	794.6
40°	836.6	821.6	782.6	746.6	736.1
42.5°	793.1	775.1	725.6	688.1	670.2
45°	746.6	724.1	667.2	625.2	608.7
47.5°	700.1	671.7	610.2	565.2	547.2
50°	650.7	616.2	550.2	502.2	484.3
52.5°	599.7	562.2	494.7	445.3	431.8
55°	539.7	508.2	436.3	394.3	382.3
57.5°	485.8	451.3	388.3	352.3	343.3
60°	437.8	395.8	340.3	313.3	305.8
62.5°	382.3	344.8	301.3	280.4	272.9
65°	328.3	298.3	266.9	250.4	244.4
67.5°	281.9	256.4	235.4	221.9	218.9
70°	230.9	217.4	205.4	194.9	194.9
72.5°	187.4	182.9	175.4	169.4	164.9
75°	143.9	149.9	146.9	140.9	140.9
77.5°	109.4	118.4	119.9	116.9	118.4
80°	76.5	90.0	93.0	91.5	93.0
82.5°	48.0	64.5	67.5	67.5	69.0
85°	28.5	40.5	42.0	42.0	43.5
87.5°	12.0	19.5	21.0	21.0	21.0
90°	0.0	0.0	0.0	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	19.46	21.02	19.83	21.34	21.65	17.62	19.18	17.98	19.49	19.81
	3H	20.93	22.33	21.30	22.66	23.02	19.32	20.73	19.70	21.06	21.42
	4H	21.42	22.74	21.82	23.08	23.46	20.01	21.33	20.41	21.68	22.06
	6H	21.73	22.95	22.14	23.32	23.71	20.60	21.82	21.01	22.18	22.57
	8H	21.81	22.97	22.23	23.36	23.76	20.81	21.97	21.24	22.36	22.76
	12H	21.85	22.96	22.28	23.34	23.77	20.96	22.08	21.39	22.46	22.89
4H	2H	19.80	21.12	20.20	21.47	21.85	18.29	19.61	18.69	19.96	20.33
	3H	21.51	22.61	21.92	23.00	23.41	20.22	21.32	20.63	21.72	22.12
	4H	22.14	23.14	22.58	23.55	23.99	21.04	22.03	21.47	22.45	22.88
	6H	22.60	23.46	23.06	23.91	24.36	21.75	22.62	22.21	23.06	23.52
	8H	22.72	23.53	23.18	23.97	24.44	22.02	22.83	22.48	23.27	23.74
	12H	22.80	23.53	23.28	24.00	24.47	22.22	22.95	22.70	23.42	23.89
8H	4H	22.37	23.18	22.83	23.62	24.09	21.39	22.20	21.85	22.64	23.11
	6H	22.96	23.63	23.45	24.12	24.59	22.24	22.91	22.74	23.40	23.88
	8H	23.16	23.76	23.67	24.27	24.75	22.59	23.19	23.10	23.70	24.19
	12H	23.31	23.84	23.81	24.33	24.90	22.88	23.42	23.39	23.91	24.47
12H	4H	22.39	23.12	22.88	23.60	24.07	21.43	22.15	21.91	22.63	23.10
	6H	23.00	23.61	23.52	24.12	24.60	22.31	22.91	22.82	23.42	23.91
	8H	23.26	23.80	23.77	24.29	24.85	22.73	23.26	23.23	23.75	24.31