

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: P1055119

Luminaire Tested: SQ4R-PH1-050D-927-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-050D-927-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

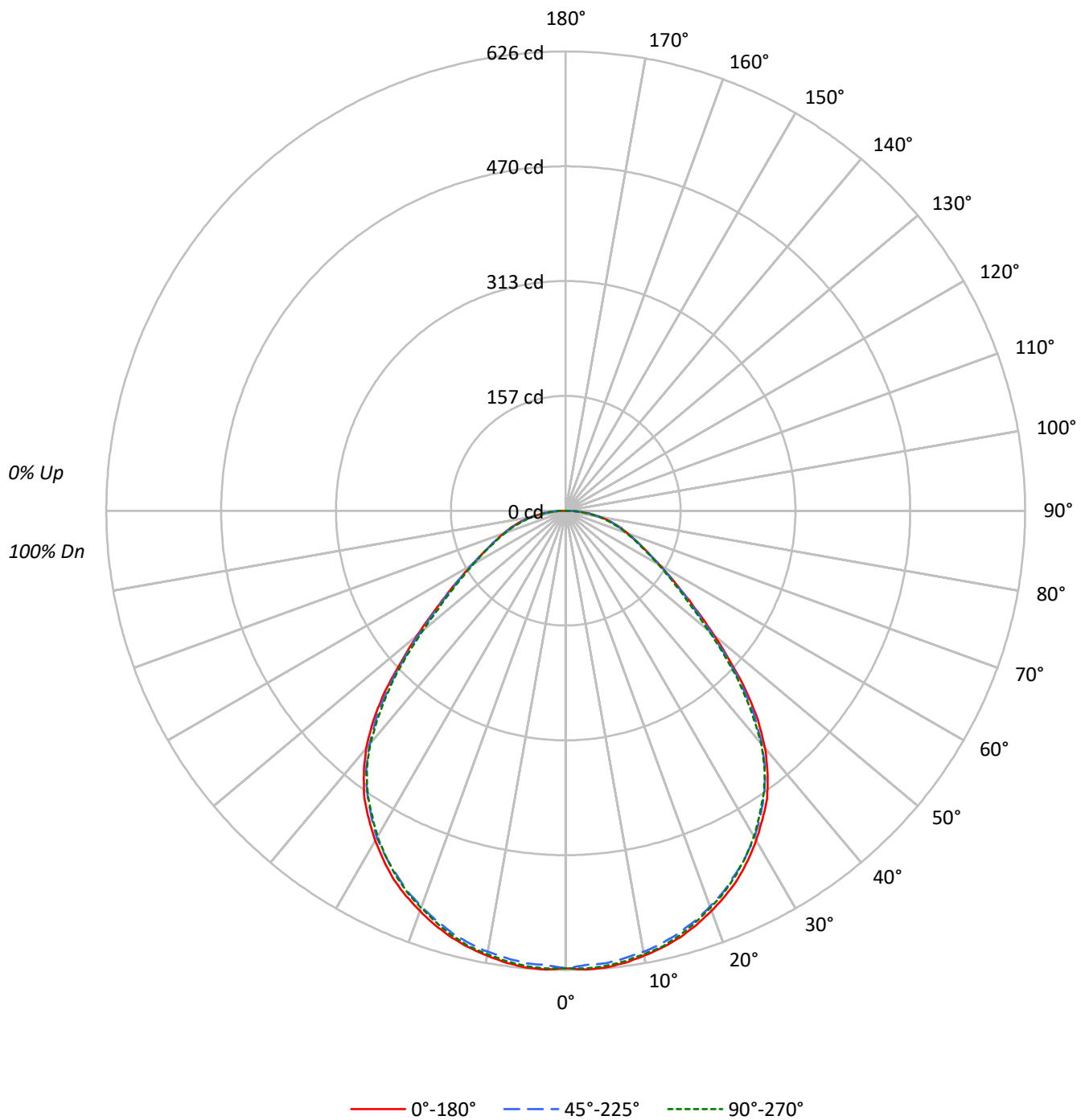
Lumens per Lamp: N/A
Luminaire Lumens: 1422.7 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	102	98	107	103	100	96	99	96	93		95	93	91		92
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		73
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55
7	68	56	47	42	67	55	47	41	53	46	41		52	46	41		51
8	64	51	43	37	62	50	43	37	49	42	37		48	42	37		47
9	60	47	39	34	58	47	39	34	45	39	34		44	38	34		43
10	56	44	36	31	55	43	36	31	42	35	31		41	35	31		40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6005	6005	6005
5°	6042	5983	6020
10°	6022	5969	5999
15°	6001	5940	5971
20°	5948	5885	5901
25°	5889	5807	5823
30°	5770	5718	5701
35°	5620	5538	5530
40°	5312	5226	5207
45°	4738	4644	4592
50°	3956	3875	3794
55°	3295	3256	3179
60°	2832	2846	2788
65°	2597	2579	2542
70°	2514	2491	2449
75°	2548	2492	2433
80°	2561	2517	2434
85°	2463	2463	2298

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4738 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	4.2
10°-20°	169.0	11.9
20°-30°	253.2	17.8
30°-40°	294.6	20.7
40°-50°	262.0	18.4
50°-60°	175.9	12.4
60°-70°	113.7	8.0
70°-80°	70.9	5.0
80°-90°	24.3	1.7
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°	481.3	33.8
0°-40°	775.9	54.5
0°-60°	1213.8	85.3
0°-90°	1422.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	625	624	619	624	623	59
15°	602	601	596	600	599	170
25°	554	552	547	550	548	255
35°	478	476	471	471	470	297
45°	348	346	341	336	337	266
55°	196	196	194	191	189	178
65°	114	115	113	112	112	114
75°	68	68	67	67	65	72
85°	22	23	22	22	21	25
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	623.7	623.7	623.7	623.7	623.7
2.5°	626.0	624.5	619.8	625.2	624.5
5°	625.2	623.7	619.1	623.7	622.9
7.5°	621.4	620.6	615.2	620.6	619.1
10°	616.0	616.0	610.6	615.2	613.7
12.5°	609.8	609.1	604.4	609.1	608.3
15°	602.1	600.6	596.0	599.8	599.1
17.5°	592.1	591.4	586.0	589.8	588.3
20°	580.6	579.0	574.4	577.5	576.0
22.5°	568.3	566.7	562.1	564.4	563.6
25°	554.4	552.1	546.7	549.8	548.2
27.5°	537.5	536.7	531.3	532.8	531.3
30°	519.0	518.2	514.4	514.4	512.8
32.5°	499.0	499.7	493.6	494.3	491.3
35°	478.2	475.9	471.2	471.2	470.5
37.5°	452.0	450.4	446.6	445.8	445.1
40°	422.7	421.2	415.8	414.3	414.3
42.5°	388.1	386.5	381.1	378.8	375.8
45°	348.0	346.5	341.1	336.5	337.3
47.5°	303.4	304.9	299.5	295.7	294.9
50°	264.1	263.3	258.7	256.4	253.3
52.5°	226.4	227.1	223.3	221.8	217.9
55°	196.3	196.3	194.0	191.0	189.4
57.5°	169.4	170.9	168.6	167.1	165.5
60°	147.1	147.8	147.8	144.8	144.8
62.5°	128.6	129.4	128.6	127.0	127.0
65°	114.0	114.7	113.2	112.4	111.6
67.5°	100.9	101.6	100.9	100.1	98.6
70°	89.3	89.3	88.5	88.5	87.0
72.5°	79.3	78.5	77.8	77.8	77.0
75°	68.5	67.8	67.0	67.0	65.4
77.5°	57.7	57.0	57.0	55.4	54.7
80°	46.2	46.2	45.4	44.7	43.9
82.5°	35.4	34.6	33.9	33.1	32.3
85°	22.3	23.1	22.3	21.6	20.8
87.5°	10.0	10.8	10.8	10.8	10.0
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	15.08	16.59	15.44	16.90	17.22	14.92	16.43	15.28	16.75	17.06
	3H	16.62	17.98	17.00	18.31	18.67	16.48	17.83	16.85	18.16	18.52
	4H	17.33	18.60	17.73	18.95	19.33	17.17	18.44	17.57	18.79	19.17
	6H	17.94	19.12	18.36	19.49	19.88	17.76	18.93	18.17	19.30	19.69
	8H	18.18	19.31	18.61	19.69	20.10	17.97	19.10	18.40	19.49	19.89
	12H	18.36	19.43	18.79	19.82	20.24	18.13	19.21	18.56	19.59	20.02
4H	2H	15.55	16.83	15.95	17.18	17.55	15.43	16.70	15.82	17.05	17.43
	3H	17.37	18.43	17.78	18.83	19.23	17.26	18.32	17.67	18.72	19.12
	4H	18.24	19.19	18.67	19.61	20.04	18.11	19.06	18.54	19.48	19.92
	6H	19.02	19.85	19.47	20.29	20.75	18.86	19.69	19.31	20.13	20.59
	8H	19.32	20.10	19.79	20.55	21.01	19.14	19.92	19.60	20.36	20.83
	12H	19.56	20.26	20.05	20.74	21.21	19.35	20.05	19.83	20.53	21.00
8H	4H	18.56	19.34	19.03	19.78	20.25	18.45	19.23	18.91	19.67	20.14
	6H	19.50	20.15	20.00	20.64	21.11	19.35	20.00	19.85	20.49	20.97
	8H	19.90	20.49	20.42	21.00	21.48	19.73	20.31	20.24	20.82	21.31
	12H	20.25	20.77	20.76	21.26	21.82	20.04	20.56	20.55	21.05	21.61
12H	4H	18.60	19.30	19.09	19.78	20.25	18.50	19.19	18.98	19.67	20.14
	6H	19.58	20.16	20.09	20.67	21.16	19.44	20.02	19.95	20.53	21.02
	8H	20.05	20.57	20.56	21.06	21.62	19.88	20.40	20.39	20.89	21.45

END OF REPORT