

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: P1055121

Luminaire Tested: SQ4R-PH1-100D-927-1-UNV-STD-W-4

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055121
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-PH1-100D-927-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

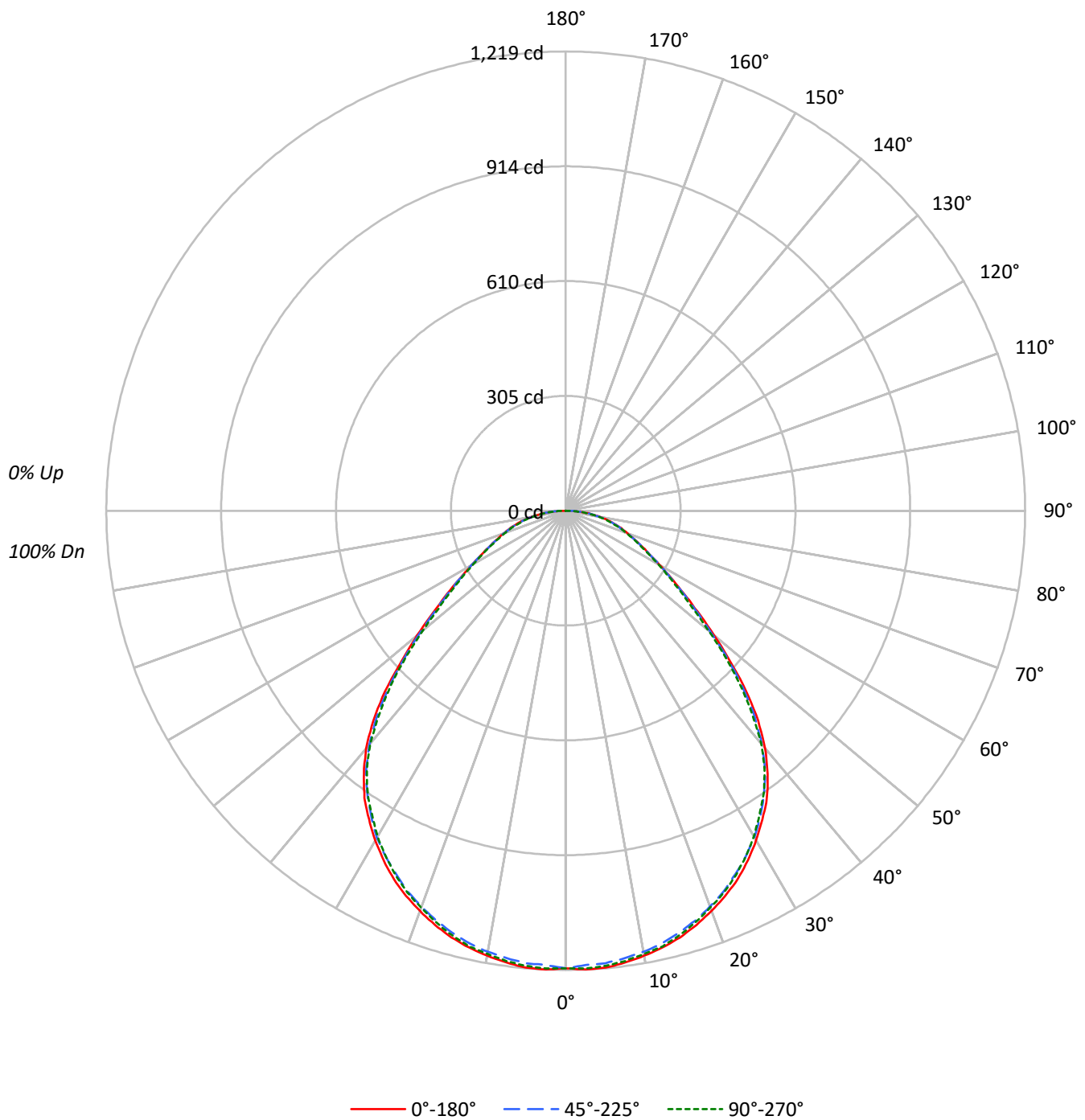
Lumens per Lamp: N/A
Luminaire Lumens: 2770.1 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11691	11691	11691
5°	11765	11649	11722
10°	11725	11623	11681
15°	11685	11566	11625
20°	11581	11458	11489
25°	11466	11308	11340
30°	11233	11133	11100
35°	10942	10783	10766
40°	10344	10175	10137
45°	9227	9043	8941
50°	7701	7544	7387
55°	6417	6341	6190
60°	5515	5543	5428
65°	5055	5021	4952
70°	4895	4853	4768
75°	4962	4851	4739
80°	4990	4907	4740
85°	4805	4805	4474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 9227 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.2	4.2
10°-20°	329.0	11.9
20°-30°	492.9	17.8
30°-40°	573.6	20.7
40°-50°	510.1	18.4
50°-60°	342.5	12.4
60°-70°	221.4	8.0
70°-80°	138.0	5.0
80°-90°	47.3	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°	937.2	33.8
0°-40°	1510.7	54.5
0°-60°	2363.4	85.3
0°-90°	2770.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2770.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1217	1214	1205	1214	1213	116
15°	1172	1169	1160	1168	1166	330
25°	1079	1075	1064	1070	1068	496
35°	931	926	918	918	916	579
45°	678	675	664	655	657	518
55°	382	382	378	372	369	346
65°	222	223	220	219	217	222
75°	133	132	130	130	127	140
85°	44	45	44	42	40	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1214.4	1214.4	1214.4	1214.4	1214.4
2.5°	1218.9	1215.9	1206.9	1217.4	1215.9
5°	1217.4	1214.4	1205.4	1214.4	1212.9
7.5°	1209.9	1208.4	1197.9	1208.4	1205.4
10°	1199.4	1199.4	1188.9	1197.9	1194.9
12.5°	1187.4	1185.9	1176.9	1185.9	1184.4
15°	1172.4	1169.4	1160.4	1167.9	1166.4
17.5°	1152.9	1151.4	1140.9	1148.4	1145.4
20°	1130.4	1127.4	1118.4	1124.4	1121.4
22.5°	1106.4	1103.4	1094.4	1098.9	1097.4
25°	1079.4	1075.0	1064.5	1070.5	1067.5
27.5°	1046.5	1045.0	1034.5	1037.5	1034.5
30°	1010.5	1009.0	1001.5	1001.5	998.5
32.5°	971.5	973.0	961.0	962.5	956.5
35°	931.0	926.5	917.5	917.5	916.0
37.5°	880.0	877.1	869.6	868.1	866.6
40°	823.1	820.1	809.6	806.6	806.6
42.5°	755.6	752.6	742.1	737.6	731.6
45°	677.7	674.7	664.2	655.2	656.7
47.5°	590.7	593.7	583.2	575.7	574.2
50°	514.2	512.7	503.7	499.2	493.2
52.5°	440.8	442.3	434.8	431.8	424.3
55°	382.3	382.3	377.8	371.8	368.8
57.5°	329.8	332.8	328.3	325.3	322.3
60°	286.4	287.9	287.9	281.9	281.9
62.5°	250.4	251.9	250.4	247.4	247.4
65°	221.9	223.4	220.4	218.9	217.4
67.5°	196.4	197.9	196.4	194.9	191.9
70°	173.9	173.9	172.4	172.4	169.4
72.5°	154.4	152.9	151.4	151.4	149.9
75°	133.4	131.9	130.4	130.4	127.4
77.5°	112.4	110.9	110.9	107.9	106.4
80°	90.0	90.0	88.5	87.0	85.5
82.5°	69.0	67.5	66.0	64.5	63.0
85°	43.5	45.0	43.5	42.0	40.5
87.5°	19.5	21.0	21.0	21.0	19.5
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	17.39	18.90	17.76	19.22	19.53	17.23	18.75	17.60	19.06	19.37
	3H	18.94	20.29	19.31	20.62	20.98	18.79	20.15	19.17	20.48	20.84
	4H	19.64	20.91	20.04	21.26	21.64	19.48	20.76	19.88	21.11	21.48
	6H	20.26	21.44	20.67	21.80	22.19	20.07	21.25	20.48	21.61	22.01
	8H	20.50	21.62	20.93	22.01	22.41	20.29	21.41	20.72	21.80	22.20
	12H	20.68	21.75	21.11	22.13	22.56	20.45	21.52	20.88	21.90	22.33
4H	2H	17.87	19.14	18.27	19.49	19.87	17.74	19.01	18.14	19.36	19.74
	3H	19.69	20.75	20.10	21.15	21.55	19.57	20.63	19.98	21.03	21.43
	4H	20.55	21.51	20.98	21.92	22.36	20.42	21.38	20.86	21.79	22.23
	6H	21.33	22.16	21.79	22.61	23.07	21.17	22.00	21.63	22.45	22.90
	8H	21.64	22.42	22.10	22.86	23.33	21.45	22.23	21.91	22.67	23.14
	12H	21.88	22.58	22.36	23.06	23.53	21.67	22.36	22.15	22.84	23.31
8H	4H	20.88	21.66	21.34	22.10	22.57	20.76	21.54	21.23	21.99	22.46
	6H	21.81	22.46	22.31	22.95	23.43	21.67	22.31	22.16	22.80	23.28
	8H	22.22	22.80	22.73	23.31	23.80	22.04	22.63	22.56	23.13	23.62
	12H	22.57	23.08	23.07	23.57	24.14	22.36	22.87	22.87	23.37	23.93
12H	4H	20.92	21.61	21.40	22.09	22.56	20.81	21.51	21.29	21.99	22.46
	6H	21.89	22.47	22.40	22.98	23.47	21.75	22.33	22.26	22.84	23.33
	8H	22.37	22.88	22.88	23.38	23.94	22.20	22.71	22.71	23.21	23.77