

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: P688577

Luminaire Tested: SQ4R-PR1-050D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688577  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PR1-050D-940-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1680.9 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

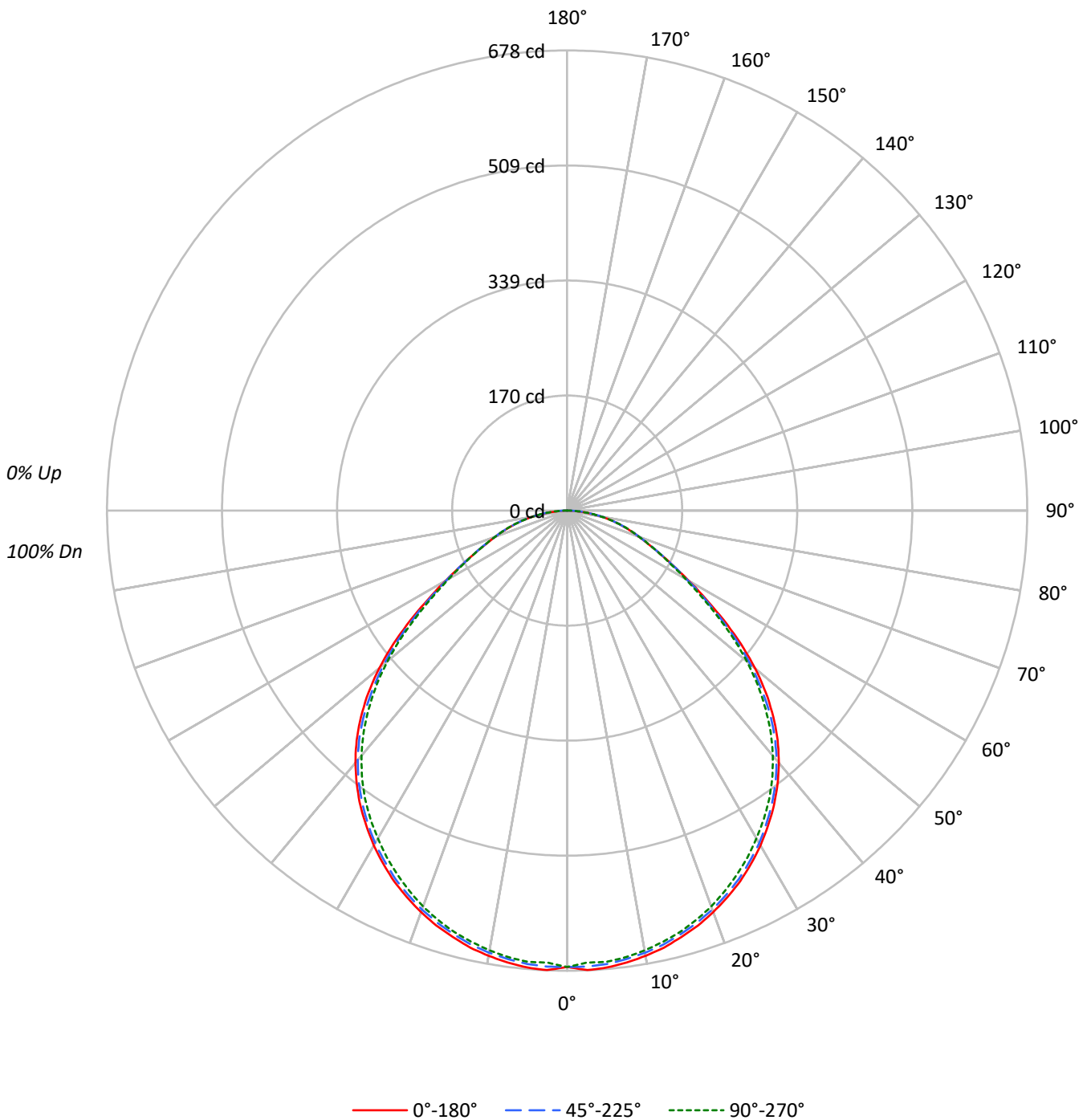
Input Watts (W): 18.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87				85	
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75				72	
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64				62	
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56				54	
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49				47	
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43				41	
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39				37	
8	63	49	41	36	61	49	41	35	47	40	35	46	40	35	45	39	35				33	
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31				30	
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29				27	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6473	6473	6473
5°	6531	6481	6448
10°	6511	6466	6432
15°	6483	6442	6407
20°	6449	6408	6360
25°	6404	6361	6288
30°	6335	6290	6200
35°	6242	6187	6099
40°	6099	6034	5924
45°	5850	5748	5630
50°	5413	5283	5178
55°	4725	4617	4520
60°	3980	3947	3870
65°	3444	3456	3431
70°	3164	3178	3178
75°	3039	3039	3058
80°	2855	2889	2855
85°	2298	2563	2563

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5850 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.6	3.8
10°-20°	182.0	10.8
20°-30°	274.5	16.3
30°-40°	327.2	19.5
40°-50°	322.7	19.2
50°-60°	246.2	14.6
60°-70°	151.9	9.0
70°-80°	86.6	5.2
80°-90°	26.1	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°	520.2	30.9
0°-40°	847.3	50.4
0°-60°	1416.3	84.3
0°-90°	1680.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	676	668	671	668	667	64
15°	650	643	646	644	643	184
25°	603	595	599	592	592	278
35°	531	525	526	520	519	332
45°	430	424	422	415	414	330
55°	282	277	275	270	269	252
65°	151	150	152	151	151	153
75°	82	82	82	82	82	86
85°	21	22	23	23	23	25
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	672.4	672.4	672.4	672.4	672.4
2.5°	677.6	670.0	672.4	670.6	666.6
5°	675.8	668.3	670.6	668.3	667.2
7.5°	671.8	664.3	666.6	664.3	663.7
10°	666.0	659.0	661.4	659.0	657.9
12.5°	659.6	652.1	655.0	652.1	650.9
15°	650.4	643.4	646.3	644.0	642.8
17.5°	641.1	633.6	636.5	634.1	632.4
20°	629.5	622.6	625.5	621.4	620.8
22.5°	616.8	609.8	612.7	606.9	606.9
25°	602.9	595.3	598.8	592.4	591.9
27.5°	586.7	579.7	582.6	576.2	575.6
30°	569.9	562.9	565.8	558.9	557.7
32.5°	550.7	544.4	546.7	539.7	539.2
35°	531.1	524.7	526.4	519.5	518.9
37.5°	509.1	503.3	504.4	496.9	496.3
40°	485.3	479.5	480.1	472.0	471.4
42.5°	459.2	453.5	452.9	444.8	444.2
45°	429.7	423.9	422.2	414.7	413.5
47.5°	397.3	391.5	388.0	381.6	381.1
50°	361.4	355.6	352.7	347.5	345.7
52.5°	322.6	316.8	314.5	309.8	308.1
55°	281.5	276.8	275.1	270.5	269.3
57.5°	242.1	238.6	238.0	233.4	232.8
60°	206.7	205.0	205.0	201.0	201.0
62.5°	176.6	175.5	176.6	174.3	173.7
65°	151.2	150.0	151.7	150.6	150.6
67.5°	129.7	129.7	130.9	130.3	130.3
70°	112.4	112.4	112.9	112.9	112.9
72.5°	96.7	96.1	97.9	97.9	97.3
75°	81.7	81.7	81.7	82.2	82.2
77.5°	66.6	66.6	67.2	67.2	66.6
80°	51.5	52.1	52.1	51.5	51.5
82.5°	36.5	37.1	37.1	37.1	36.5
85°	20.8	22.0	23.2	23.2	23.2
87.5°	7.5	9.8	11.6	11.6	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)