

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: P1036329

Luminaire Tested: SQ4R-PW1-050D-B35-1D-UNV

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P1036329  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564826)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PW1-050D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -  
Ballast/Driver: -

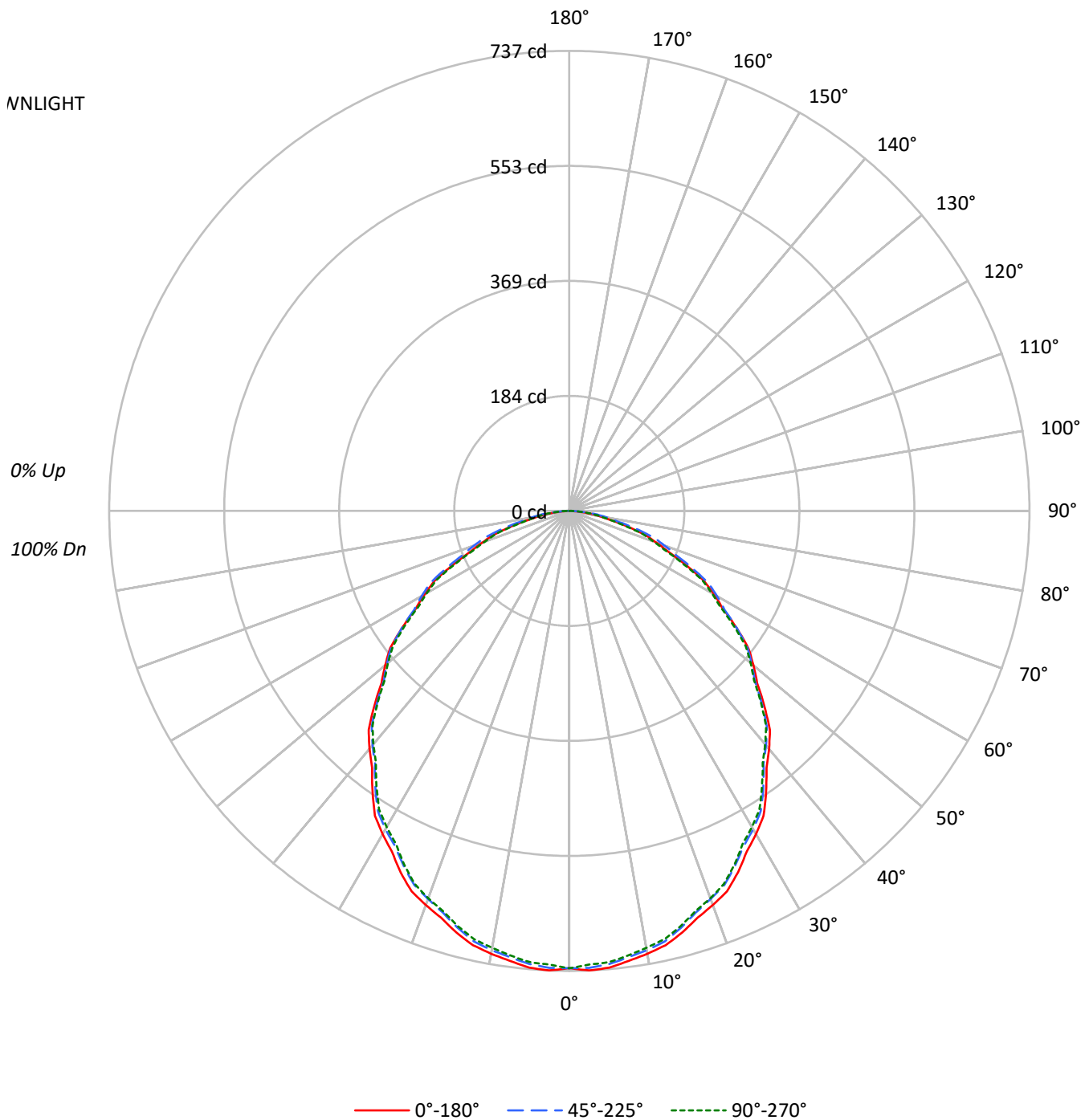
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1864.1 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	87	87	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	73	73	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	63	63	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	54	54	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	47	47	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	42	42	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	37	37	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	33	33	33	31
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	30	30	30	28
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	28	28	28	26

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

	0°	45°	90°
0°	6760	6760	6760
5°	6803	6750	6720
10°	6749	6695	6658
15°	6679	6604	6579
20°	6598	6496	6484
25°	6506	6388	6368
30°	6369	6273	6231
35°	6188	6099	6063
40°	5994	5902	5877
45°	5761	5686	5660
50°	5523	5476	5439
55°	5263	5263	5181
60°	4943	5039	4860
65°	4523	4748	4412
70°	3987	4373	3882
75°	3408	3911	3315
80°	2641	3289	2678
85°	1704	2530	2244

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5761 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.0	3.7
10°-20°	194.8	10.4
20°-30°	288.9	15.5
30°-40°	338.1	18.1
40°-50°	336.6	18.1
50°-60°	290.7	15.6
60°-70°	209.2	11.2
70°-80°	109.7	5.9
80°-90°	27.2	1.5
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°	552.7	29.7
0°-40°	890.8	47.8
0°-60°	1518.0	81.4
0°-90°	1864.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1864.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	733	733	733	733	733	
5°	735	726	729	727	726	70
15°	699	690	691	690	689	197
25°	639	628	628	624	626	294
35°	549	542	542	536	538	343
45°	442	438	436	434	434	341
55°	327	327	327	323	322	292
65°	207	214	218	209	202	205
75°	96	104	110	102	93	102
85°	16	21	24	23	21	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	732.7	732.7	732.7	732.7	732.7
2.5°	736.9	730.8	732.7	731.1	727.6
5°	734.6	726.4	728.8	726.9	725.6
7.5°	727.2	719.6	721.3	719.2	718.6
10°	720.4	712.9	714.6	712.1	710.7
12.5°	712.7	704.6	706.4	703.7	703.0
15°	699.2	690.3	691.4	690.0	688.8
17.5°	683.3	674.4	674.5	672.6	672.2
20°	672.0	662.6	661.6	659.1	660.4
22.5°	659.7	649.7	648.8	645.2	646.9
25°	639.1	628.3	627.5	623.6	625.5
27.5°	615.3	604.8	604.8	599.4	601.3
30°	597.8	587.6	588.8	582.3	584.9
32.5°	579.2	570.1	570.6	564.2	566.9
35°	549.4	541.8	541.5	536.4	538.3
37.5°	518.8	512.2	511.1	508.2	508.7
40°	497.7	492.0	490.0	488.0	488.0
42.5°	475.5	470.4	468.2	466.8	466.4
45°	441.5	437.8	435.8	434.4	433.8
47.5°	408.0	404.4	402.7	401.8	401.1
50°	384.8	382.2	381.5	379.6	378.9
52.5°	361.6	360.0	359.3	356.9	356.2
55°	327.2	326.7	327.2	322.8	322.1
57.5°	291.6	292.7	294.7	288.7	287.1
60°	267.9	270.4	273.1	266.0	263.4
62.5°	243.6	247.7	251.4	243.2	239.6
65°	207.2	213.5	217.5	209.0	202.1
67.5°	172.1	180.0	184.8	175.6	167.7
70°	147.8	156.7	162.1	152.8	143.9
72.5°	126.6	136.5	140.9	132.1	123.3
75°	95.6	104.4	109.7	102.4	93.0
77.5°	67.8	76.1	80.5	74.2	66.3
80°	49.7	58.5	61.9	56.7	50.4
82.5°	35.2	42.7	44.9	41.7	37.4
85°	16.1	21.1	23.9	22.6	21.2
87.5°	4.1	7.6	9.8	9.8	10.4
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	17.65	19.25	18.02	19.56	19.88	17.55	19.15	17.92	19.47	19.78
	3H	19.21	20.65	19.59	20.98	21.34	19.08	20.52	19.46	20.85	21.21
	4H	19.76	21.12	20.16	21.46	21.84	19.62	20.98	20.02	21.33	21.70
	6H	20.05	21.31	20.46	21.67	22.07	19.92	21.18	20.33	21.54	21.93
	8H	20.14	21.34	20.57	21.73	22.13	20.02	21.22	20.45	21.61	22.01
	12H	20.18	21.33	20.61	21.71	22.14	20.08	21.23	20.51	21.61	22.04
4H	2H	18.29	19.65	18.69	20.00	20.37	18.21	19.57	18.61	19.92	20.30
	3H	20.09	21.23	20.50	21.62	22.02	19.98	21.11	20.39	21.51	21.91
	4H	20.75	21.78	21.18	22.19	22.63	20.63	21.65	21.06	22.07	22.51
	6H	21.16	22.05	21.61	22.49	22.95	21.04	21.93	21.49	22.37	22.82
	8H	21.29	22.12	21.75	22.56	23.03	21.18	22.01	21.64	22.45	22.92
	12H	21.35	22.10	21.83	22.58	23.05	21.27	22.02	21.75	22.50	22.97
8H	4H	21.03	21.86	21.49	22.31	22.77	20.92	21.76	21.38	22.20	22.66
	6H	21.55	22.24	22.04	22.73	23.20	21.44	22.13	21.93	22.62	23.09
	8H	21.75	22.37	22.26	22.88	23.36	21.65	22.27	22.16	22.78	23.26
	12H	21.87	22.42	22.38	22.91	23.47	21.80	22.35	22.31	22.84	23.40
12H	4H	21.05	21.80	21.53	22.27	22.74	20.94	21.69	21.42	22.17	22.64
	6H	21.59	22.21	22.10	22.72	23.21	21.49	22.11	22.00	22.61	23.10
	8H	21.85	22.40	22.36	22.89	23.45	21.75	22.30	22.26	22.79	23.35