

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: P1036333

Luminaire Tested: SQ4R-PW1-075D-B2750-1D-UNV-W2A\_3000K

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P1036333  
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-PW1-075D-B2750-1D-UNV-W2A\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

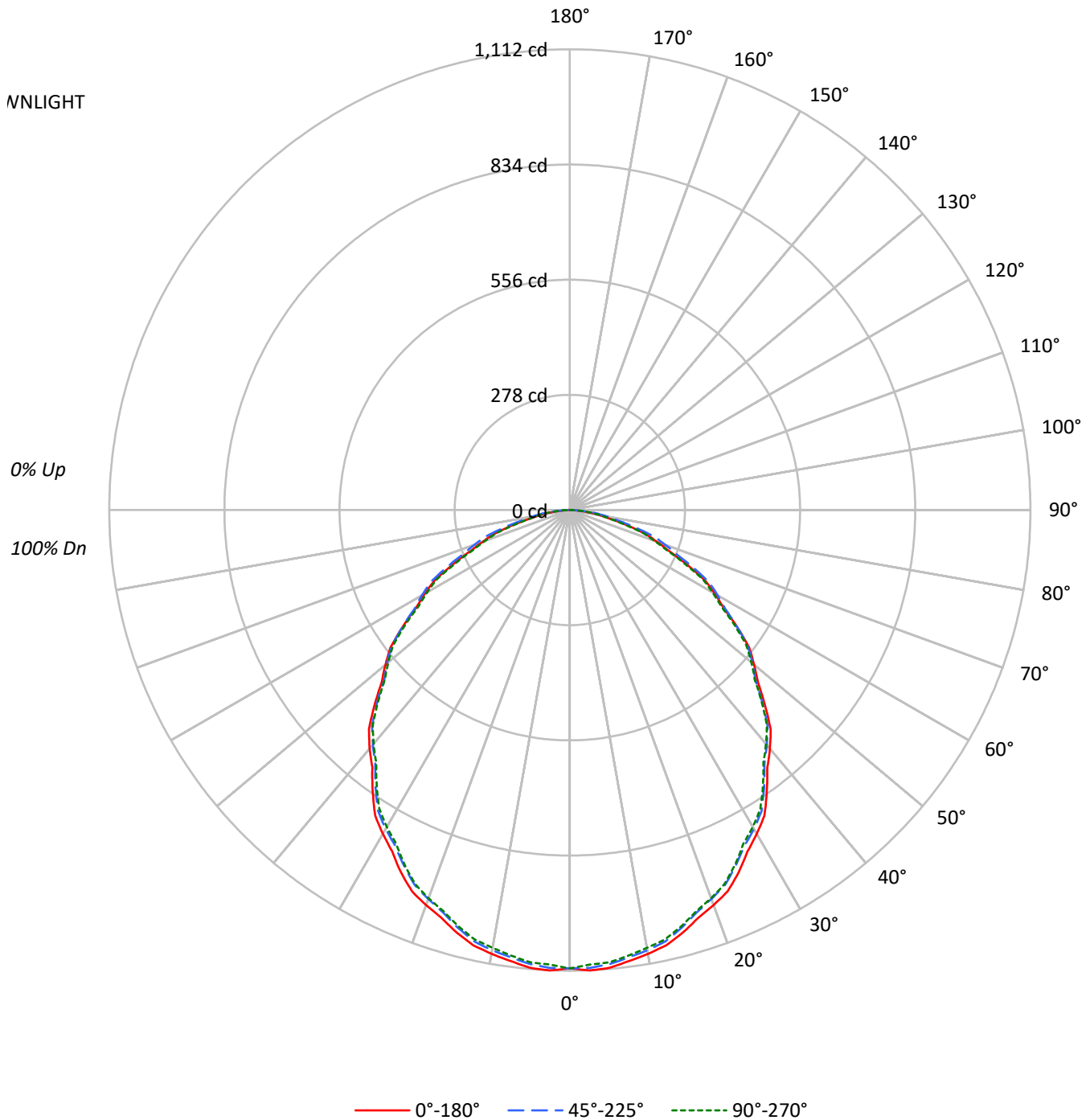
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2814.6 lumens  
Efficiency: N/A  
Efficacy: 109.9 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): 25.6  
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°	10206	10206	10206
5°	10273	10191	10147
10°	10190	10109	10053
15°	10084	9970	9934
20°	9963	9809	9791
25°	9823	9645	9614
30°	9616	9471	9408
35°	9343	9210	9155
40°	9052	8909	8875
45°	8699	8584	8545
50°	8339	8269	8212
55°	7948	7948	7824
60°	7466	7608	7339
65°	6829	7169	6661
70°	6018	6598	5864
75°	5147	5907	5001
80°	3990	4973	4043
85°	2572	3822	3398

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8699 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	3.7
10°-20°	294.1	10.4
20°-30°	436.3	15.5
30°-40°	510.5	18.1
40°-50°	508.2	18.1
50°-60°	438.8	15.6
60°-70°	315.9	11.2
70°-80°	165.7	5.9
80°-90°	41.1	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°	834.5	29.6
0°-40°	1345.0	47.8
0°-60°	2292.0	81.4
0°-90°	2814.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2814.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1109	1097	1100	1098	1096	105
15°	1056	1042	1044	1042	1040	298
25°	965	949	947	942	944	444
35°	830	818	818	810	813	519
45°	667	661	658	656	655	514
55°	494	493	494	487	486	441
65°	313	322	328	316	305	310
75°	144	158	166	155	140	155
85°	24	32	36	34	32	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1106.2	1106.2	1106.2	1106.2	1106.2
2.5°	1112.5	1103.3	1106.2	1103.8	1098.4
5°	1109.2	1096.8	1100.4	1097.5	1095.6
7.5°	1097.9	1086.5	1089.0	1086.0	1084.8
10°	1087.7	1076.3	1079.0	1075.1	1073.1
12.5°	1076.1	1063.8	1066.6	1062.5	1061.5
15°	1055.7	1042.2	1043.8	1041.9	1040.0
17.5°	1031.7	1018.3	1018.5	1015.4	1014.9
20°	1014.7	1000.4	999.0	995.1	997.2
22.5°	996.0	980.9	979.5	974.1	976.8
25°	964.9	948.7	947.4	941.6	944.4
27.5°	929.1	913.2	913.2	904.9	907.9
30°	902.6	887.3	889.0	879.2	883.1
32.5°	874.5	860.8	861.6	852.0	855.8
35°	829.5	818.1	817.7	809.9	812.8
37.5°	783.4	773.4	771.7	767.3	767.9
40°	751.6	742.9	739.7	736.9	736.9
42.5°	717.9	710.2	707.0	704.8	704.1
45°	666.7	660.9	657.9	655.9	654.9
47.5°	615.9	610.7	608.0	606.7	605.7
50°	581.0	577.1	576.1	573.0	572.1
52.5°	545.8	543.6	542.5	538.8	537.8
55°	494.1	493.3	494.1	487.4	486.4
57.5°	440.3	441.9	445.1	435.8	433.5
60°	404.6	408.2	412.3	401.6	397.7
62.5°	367.7	374.0	379.6	367.1	361.7
65°	312.8	322.4	328.4	315.5	305.1
67.5°	259.9	271.6	278.9	265.1	253.2
70°	223.1	236.6	244.6	230.6	217.4
72.5°	191.2	206.1	212.7	199.5	186.2
75°	144.4	157.6	165.7	154.6	140.3
77.5°	102.4	115.0	121.6	112.1	100.2
80°	75.1	88.4	93.6	85.5	76.1
82.5°	53.2	64.3	67.9	63.0	56.5
85°	24.3	32.0	36.1	34.2	32.1
87.5°	6.3	11.6	14.8	14.8	15.6
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	19.08	20.68	19.45	21.00	21.31	18.98	20.58	19.35	20.90	21.21
	3H	20.64	22.08	21.02	22.41	22.77	20.51	21.95	20.89	22.28	22.64
	4H	21.19	22.55	21.59	22.89	23.27	21.05	22.41	21.45	22.76	23.13
	6H	21.48	22.74	21.90	23.11	23.50	21.35	22.61	21.76	22.97	23.36
	8H	21.58	22.77	22.00	23.16	23.56	21.45	22.65	21.88	23.04	23.44
	12H	21.61	22.76	22.04	23.14	23.57	21.52	22.66	21.95	23.05	23.47
4H	2H	19.72	21.08	20.12	21.43	21.80	19.64	21.00	20.04	21.35	21.73
	3H	21.52	22.66	21.93	23.05	23.45	21.41	22.54	21.82	22.94	23.34
	4H	22.18	23.21	22.62	23.62	24.06	22.06	23.09	22.49	23.50	23.94
	6H	22.59	23.48	23.04	23.92	24.38	22.47	23.36	22.92	23.80	24.26
	8H	22.72	23.55	23.18	24.00	24.46	22.61	23.44	23.07	23.88	24.35
	12H	22.79	23.53	23.27	24.01	24.48	22.70	23.45	23.19	23.93	24.40
8H	4H	22.46	23.29	22.92	23.74	24.20	22.35	23.19	22.81	23.63	24.09
	6H	22.98	23.67	23.47	24.16	24.64	22.87	23.56	23.36	24.05	24.53
	8H	23.18	23.80	23.69	24.31	24.79	23.08	23.70	23.59	24.21	24.69
	12H	23.30	23.85	23.81	24.34	24.90	23.24	23.78	23.74	24.27	24.84
12H	4H	22.48	23.23	22.96	23.70	24.17	22.37	23.12	22.86	23.60	24.07
	6H	23.02	23.65	23.54	24.15	24.64	22.92	23.54	23.43	24.05	24.53
	8H	23.28	23.83	23.79	24.32	24.88	23.19	23.73	23.69	24.22	24.79