

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: P854419

Luminaire Tested: SQ2-WBN-025U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854419  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBN-025U-100D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

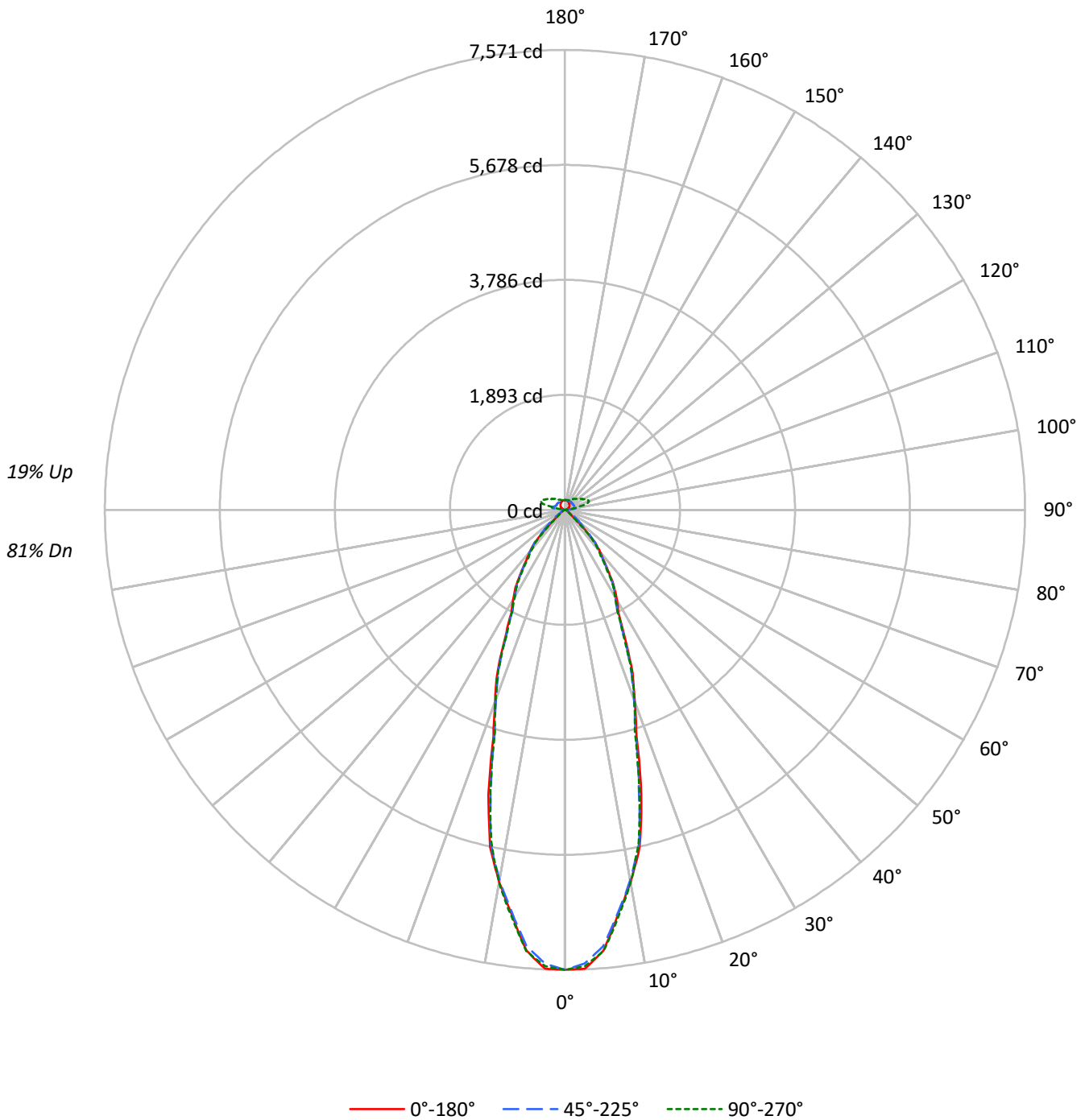
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5399.5 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 45.5  
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	0
RCR																		
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	81
1	108	105	103	100	104	101	99	97	94	92	91	87	86	85	81	80	79	76
2	102	97	93	89	98	94	90	87	87	84	82	82	79	77	76	75	73	71
3	97	90	84	80	93	87	82	78	82	78	75	77	74	71	72	70	68	66
4	91	83	77	73	88	81	76	72	76	72	69	72	69	66	68	66	63	61
5	86	78	71	67	83	76	70	66	72	67	64	68	64	61	65	62	59	57
6	82	73	66	62	79	71	65	61	67	63	59	64	60	57	61	58	55	54
7	78	68	62	57	75	66	61	57	63	59	55	61	57	54	58	55	52	50
8	74	64	58	54	71	63	57	53	60	55	52	58	53	50	55	52	49	48
9	70	60	54	50	68	59	54	50	57	52	49	55	51	48	53	49	46	45
10	67	57	51	47	65	56	51	47	54	49	46	52	48	45	50	47	44	43

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

	0°	45°	90°
0°	122234	122234	122234
5°	118022	116846	118151
10°	102012	101529	102255
15°	81177	78618	78932
20°	57666	56905	57321
25°	41487	40673	40387
30°	31700	30848	30773
35°	24882	24461	23824
40°	18853	18598	17692
45°	10549	12604	9414
50°	3710	7759	3273
55°	2269	4234	2156
60°	1734	2212	1605
65°	1589	1643	1486
70°	1520	1520	1393
75°	1422	1422	1341
80°	1246	1246	1246
85°	1241	1000	1000

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 12604 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	657.2	12.2
10°-20°	1306.1	24.2
20°-30°	1081.6	20.0
30°-40°	778.1	14.4
40°-50°	396.4	7.3
50°-60°	103.2	1.9
60°-70°	42.8	0.8
70°-80°	23.7	0.4
80°-90°	7.4	0.1
90°-100°	65.4	1.2
100°-110°	203.4	3.8
110°-120°	199.0	3.7
120°-130°	162.5	3.0
130°-140°	132.9	2.5
140°-150°	103.7	1.9
150°-160°	74.9	1.4
160°-170°	45.8	0.8
170°-180°	15.4	0.3
0°-30°	3044.8	56.4
0°-40°	3822.9	70.8
0°-60°	4322.6	80.1
0°-90°	4396.5	81.4
90°-120°	467.8	8.7
90°-150°	867.0	16.1
90°-180°	1003.0	18.6
0°-180°	5399.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7571	7571	7571	7571	7571	
5°	7282	7271	7209	7314	7290	657
15°	4856	4801	4703	4736	4722	1318
25°	2329	2325	2283	2263	2267	1095
35°	1262	1270	1241	1220	1209	792
45°	462	532	552	513	412	369
55°	81	94	150	87	77	79
65°	42	43	43	40	39	42
75°	23	23	23	22	22	24
85°	7	7	5	7	5	7
90°	0	1	3	3	3	1
95°	9	26	120	44	29	10
105°	36	50	200	382	365	38
115°	64	75	163	335	393	63
125°	88	98	161	264	309	78
135°	106	118	160	228	256	82
145°	124	134	160	197	214	78
155°	142	147	161	177	182	65
165°	156	157	162	167	168	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7570.6	7570.6	7570.6	7570.6	7570.6
2.5°	7558.8	7546.2	7473.9	7533.8	7519.1
5°	7281.9	7271.4	7209.4	7313.6	7289.9
7.5°	6710.0	6718.9	6682.6	6774.7	6749.5
10°	6222.2	6245.9	6192.7	6326.3	6237.0
12.5°	5683.9	5668.7	5631.8	5652.5	5603.1
15°	4856.4	4801.2	4703.3	4736.5	4722.1
17.5°	3911.7	3933.0	3848.0	3844.4	3828.2
20°	3356.2	3362.8	3311.9	3338.7	3336.1
22.5°	2909.3	2910.6	2845.6	2884.8	2861.2
25°	2328.8	2324.9	2283.1	2263.1	2267.0
27.5°	1909.8	1893.5	1862.0	1875.2	1865.5
30°	1700.3	1687.1	1654.6	1662.4	1650.6
32.5°	1512.2	1512.8	1479.5	1475.5	1466.9
35°	1262.4	1270.3	1241.0	1220.5	1208.7
37.5°	1039.5	1046.9	1022.0	992.3	982.3
40°	894.5	899.7	882.4	847.3	839.4
42.5°	736.5	758.6	741.6	708.5	691.1
45°	462.0	531.6	552.0	513.4	412.3
47.5°	233.7	330.1	393.8	290.8	191.5
50°	147.7	214.7	308.9	174.9	130.3
52.5°	113.4	147.8	246.6	129.2	104.5
55°	80.6	93.7	150.4	87.1	76.6
57.5°	62.3	69.7	90.0	65.9	59.4
60°	53.7	59.0	68.5	56.3	49.7
62.5°	48.3	51.5	55.6	47.8	45.4
65°	41.6	42.9	43.0	40.3	38.9
67.5°	35.5	36.8	36.5	35.2	33.8
70°	32.2	33.5	32.2	30.9	29.5
72.5°	27.9	29.2	27.9	27.6	26.3
75°	22.8	22.8	22.8	21.5	21.5
77.5°	17.7	18.0	16.7	16.6	15.6
80°	13.4	14.7	13.4	13.4	13.4
82.5°	11.3	11.5	10.2	10.2	10.2
85°	6.7	6.7	5.4	6.7	5.4
87.5°	2.1	2.3	2.7	2.7	2.7
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.1	37.9	12.4	10.1
95°	8.9	26.4	120.0	44.3	28.8
97.5°	16.3	34.3	198.7	123.7	77.9
100°	21.8	38.3	224.1	209.6	139.8
102.5°	27.4	43.1	219.3	299.3	235.0
105°	35.7	50.2	200.3	382.3	364.9
107.5°	44.0	57.6	182.0	388.7	407.9
110°	49.6	63.1	172.5	379.6	417.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.1	67.9	167.8	363.2	411.1
115°	63.5	75.1	162.6	335.4	392.6
117.5°	71.6	82.2	160.4	308.9	367.4
120°	76.3	87.0	159.6	293.8	350.0
122.5°	81.1	91.8	160.4	281.0	332.5
125°	88.2	97.9	160.6	263.8	309.3
127.5°	94.0	103.9	160.6	250.9	289.7
130°	97.2	107.8	160.6	243.7	278.6
132.5°	101.1	111.8	159.8	237.3	269.9
135°	106.1	117.7	159.6	227.7	255.8
137.5°	111.8	122.5	159.6	218.1	243.7
140°	115.0	125.7	159.6	211.7	235.0
142.5°	119.0	128.9	159.6	205.3	226.2
145°	123.9	133.6	159.6	196.7	214.2
147.5°	129.9	138.2	160.6	188.7	202.5
150°	133.8	140.6	160.6	184.7	195.3
152.5°	137.0	143.0	160.6	180.7	189.8
155°	141.8	146.6	160.6	176.6	182.4
157.5°	146.5	150.2	160.6	173.0	176.7
160°	149.7	152.6	160.6	170.6	173.5
162.5°	152.1	154.2	160.6	169.0	171.1
165°	155.7	156.6	161.6	166.6	168.5
167.5°	157.8	158.0	160.6	165.2	166.2
170°	158.6	159.6	160.6	163.6	164.6
172.5°	160.2	160.4	161.4	162.8	163.0
175°	161.6	161.6	161.6	162.6	161.6
177.5°	161.6	161.6	161.6	161.6	161.6
180°	161.6	161.6	161.6	161.6	161.6

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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	6.35	7.22	7.02	7.87	8.62	5.97	6.83	6.64	7.48	8.23
	3H	7.40	8.16	8.08	8.83	9.62	6.97	7.73	7.65	8.40	9.19
	4H	7.83	8.54	8.53	9.22	10.02	7.40	8.11	8.10	8.79	9.59
	6H	8.14	8.80	8.86	9.49	10.30	7.73	8.38	8.45	9.07	9.89
	8H	8.25	8.86	8.97	9.56	10.38	7.84	8.45	8.56	9.16	9.97
	12H	8.31	8.90	9.04	9.59	10.43	7.89	8.47	8.61	9.17	10.01
4H	2H	6.58	7.29	7.29	7.97	8.77	6.25	6.97	6.96	7.64	8.45
	3H	7.88	8.46	8.59	9.18	9.99	7.50	8.08	8.21	8.80	9.62
	4H	8.44	8.96	9.17	9.68	10.53	8.06	8.58	8.78	9.30	10.15
	6H	8.89	9.34	9.64	10.08	10.95	8.52	8.97	9.27	9.71	10.57
	8H	9.04	9.46	9.80	10.20	11.07	8.67	9.09	9.42	9.83	10.70
	12H	9.15	9.52	9.92	10.29	11.16	8.76	9.13	9.53	9.89	10.77
8H	4H	8.58	9.00	9.33	9.74	10.61	8.24	8.66	8.99	9.39	10.26
	6H	9.16	9.50	9.94	10.28	11.16	8.82	9.16	9.60	9.94	10.81
	8H	9.40	9.70	10.20	10.49	11.37	9.05	9.35	9.85	10.14	11.03
	12H	9.59	9.86	10.39	10.63	11.58	9.23	9.49	10.02	10.26	11.22
12H	4H	8.56	8.93	9.33	9.69	10.56	8.22	8.59	8.99	9.36	10.23
	6H	9.18	9.48	9.97	10.26	11.15	8.85	9.15	9.64	9.93	10.82
	8H	9.46	9.72	10.25	10.49	11.44	9.12	9.38	9.91	10.16	11.11