

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: P854479

Luminaire Tested: SQ2-WBN-125U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854479  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2308-130-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBN-125U-100D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

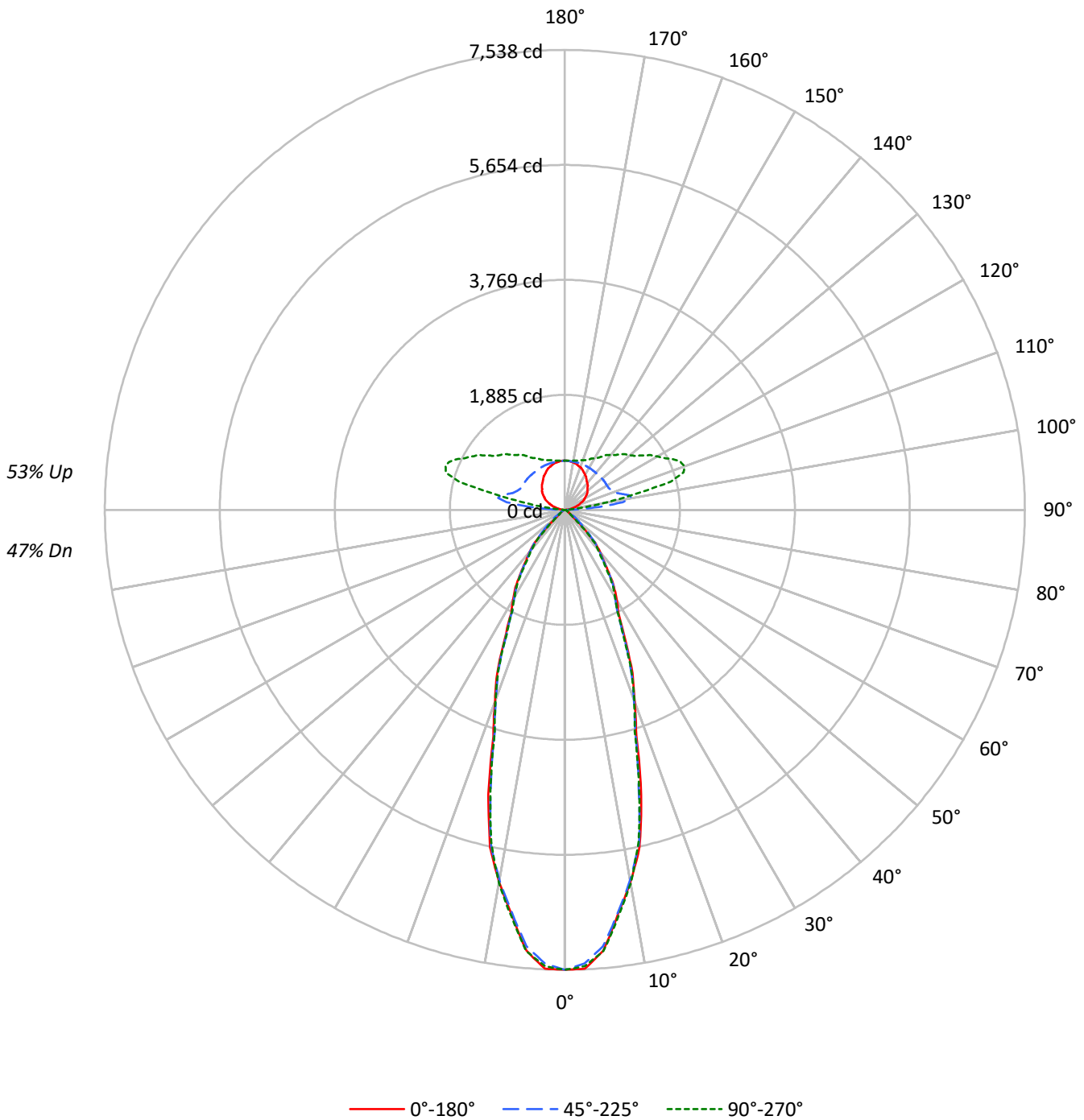
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9348.3 lumens  
Efficiency: N/A  
Efficacy: 114.0 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: General Diffuse  
  
Input Watts (W): 82  
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47	47	47	47	
1	99	96	93	90	91	88	86	83	75	73	71	62	61	60	50	50	49	44	44	44	44	
2	92	86	82	77	85	80	76	72	68	65	63	57	55	54	47	46	45	41	41	41	41	
3	86	78	73	68	79	73	68	64	63	59	56	53	51	49	44	43	42	38	38	38	38	
4	80	72	65	60	74	67	61	57	58	54	51	50	47	45	42	40	39	35	35	35	35	
5	75	66	59	54	70	61	56	51	54	49	46	46	43	41	39	37	36	33	33	33	33	
6	70	60	54	49	65	57	51	47	50	45	42	43	40	38	37	35	33	31	31	31	31	
7	66	56	49	44	61	53	47	43	46	42	39	41	37	35	35	33	31	29	29	29	29	
8	62	52	45	41	58	49	43	39	43	39	36	38	35	33	33	31	29	27	27	27	27	
9	59	48	42	38	55	46	40	36	41	36	33	36	33	31	32	29	28	26	26	26	26	
10	55	45	39	35	52	43	37	34	38	34	31	34	31	29	30	28	26	25	25	25	25	

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

	0°	45°	90°
0°	121709	121709	121709
5°	117514	116342	117644
10°	101575	101091	101816
15°	80827	78278	78592
20°	57419	56661	57074
25°	41309	40499	40214
30°	31564	30715	30641
35°	24776	24354	23722
40°	18771	18518	17616
45°	10503	12549	9373
50°	3695	7726	3258
55°	2258	4217	2145
60°	1728	2202	1598
65°	1585	1635	1482
70°	1515	1515	1388
75°	1416	1416	1335
80°	1246	1246	1246
85°	1241	982	982

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 12549 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	654.3	7.0
10°-20°	1300.5	13.9
20°-30°	1076.9	11.5
30°-40°	774.8	8.3
40°-50°	394.7	4.2
50°-60°	102.8	1.1
60°-70°	42.6	0.5
70°-80°	23.7	0.3
80°-90°	7.9	0.1
90°-100°	308.2	3.3
100°-110°	1003.2	10.7
110°-120°	992.4	10.6
120°-130°	811.0	8.7
130°-140°	662.8	7.1
140°-150°	516.3	5.5
150°-160°	372.1	4.0
160°-170°	227.4	2.4
170°-180°	76.7	0.8
0°-30°	3031.7	32.4
0°-40°	3806.5	40.7
0°-60°	4303.9	46.0
0°-90°	4378.1	46.8
90°-120°	2303.8	24.6
90°-150°	4293.8	45.9
90°-180°	4970.0	53.2
0°-180°	9348.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7538	7538	7538	7538	7538	
5°	7251	7240	7178	7282	7259	654
15°	4836	4781	4683	4716	4702	1313
25°	2319	2315	2273	2253	2257	1091
35°	1257	1265	1236	1215	1204	789
45°	460	529	550	511	410	368
55°	80	93	150	87	76	79
65°	42	43	43	40	39	41
75°	23	23	23	21	21	24
85°	7	7	5	7	5	7
90°	0	3	7	6	6	2
95°	42	127	565	201	124	48
105°	170	246	994	1898	1797	182
115°	315	376	810	1668	1963	312
125°	438	488	799	1317	1553	390
135°	529	584	795	1137	1282	409
145°	618	664	793	979	1072	387
155°	706	729	798	877	910	325
165°	770	777	800	830	839	217
175°	803	803	803	808	806	76
180°	806	806	806	806	806	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7538.1	7538.1	7538.1	7538.1	7538.1
2.5°	7526.3	7513.7	7441.8	7501.4	7486.7
5°	7250.6	7240.1	7178.3	7282.1	7258.6
7.5°	6681.2	6690.0	6653.9	6745.6	6720.5
10°	6195.5	6219.0	6166.0	6299.1	6210.2
12.5°	5659.5	5644.3	5607.6	5628.2	5579.0
15°	4835.5	4780.6	4683.0	4716.1	4701.8
17.5°	3894.9	3916.0	3831.5	3827.9	3811.7
20°	3341.8	3348.3	3297.7	3324.3	3321.7
22.5°	2896.7	2898.1	2833.4	2872.4	2848.9
25°	2318.8	2314.9	2273.3	2253.3	2257.3
27.5°	1901.6	1885.4	1854.0	1867.1	1857.4
30°	1693.0	1679.9	1647.5	1655.2	1643.5
32.5°	1505.7	1506.3	1473.1	1469.2	1460.5
35°	1257.0	1264.9	1235.6	1215.3	1203.5
37.5°	1035.0	1042.4	1017.6	988.0	978.1
40°	890.6	895.8	878.6	843.6	835.8
42.5°	733.3	755.3	738.4	705.4	688.1
45°	460.0	529.3	549.6	511.2	410.5
47.5°	232.7	328.7	392.1	289.5	190.7
50°	147.1	213.8	307.6	174.2	129.7
52.5°	112.9	147.1	245.5	128.6	104.0
55°	80.2	93.3	149.8	86.7	76.2
57.5°	62.0	69.4	89.6	65.6	59.1
60°	53.5	58.7	68.2	56.0	49.5
62.5°	48.1	51.3	55.4	47.6	45.2
65°	41.5	42.8	42.8	40.1	38.8
67.5°	35.3	36.6	36.4	35.0	33.7
70°	32.1	33.4	32.1	30.7	29.4
72.5°	27.8	29.1	27.8	27.5	26.2
75°	22.7	22.7	22.7	21.4	21.4
77.5°	17.7	17.9	16.6	16.6	15.5
80°	13.4	14.7	13.4	13.4	13.4
82.5°	11.2	11.5	10.2	10.2	10.2
85°	6.7	6.7	5.3	6.7	5.3
87.5°	2.1	2.7	3.5	3.3	3.3
90°	0.0	2.9	6.9	5.9	5.9
92.5°	14.3	51.3	163.9	54.0	41.6
95°	41.6	126.9	564.8	201.4	123.9
97.5°	78.3	165.1	958.5	583.8	356.3
100°	102.1	187.3	1106.8	986.9	640.1
102.5°	129.0	211.2	1088.5	1460.1	1110.1
105°	170.4	246.0	993.8	1898.2	1797.4
107.5°	215.2	286.3	903.9	1936.2	2042.9
110°	247.7	312.6	861.0	1889.0	2081.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	274.7	338.8	834.1	1803.8	2052.4
115°	315.1	376.1	809.5	1668.3	1962.9
117.5°	356.7	411.7	800.0	1544.3	1837.4
120°	380.5	434.7	797.6	1468.0	1751.8
122.5°	403.5	457.0	798.4	1401.7	1666.2
125°	438.0	488.3	798.6	1317.2	1552.7
127.5°	467.5	519.0	798.4	1253.9	1450.2
130°	486.5	538.8	797.6	1217.8	1393.1
132.5°	503.2	557.8	796.8	1184.2	1348.7
135°	529.1	584.3	794.7	1136.8	1282.2
137.5°	554.5	610.1	792.5	1088.7	1217.8
140°	572.7	626.0	791.7	1056.0	1178.1
142.5°	590.1	641.1	791.7	1024.8	1133.7
145°	618.3	663.8	792.7	979.1	1072.1
147.5°	645.6	685.2	794.1	940.2	1012.1
150°	663.9	698.7	795.7	916.9	978.0
152.5°	682.1	710.8	796.4	899.2	947.8
155°	705.5	728.7	797.6	876.7	909.6
157.5°	727.7	744.3	798.8	860.0	883.0
160°	741.2	754.7	799.6	849.6	868.0
162.5°	753.0	763.5	799.6	840.7	854.5
165°	769.9	776.7	799.6	829.6	839.2
167.5°	781.8	786.0	799.8	821.1	826.2
170°	789.7	791.6	800.6	815.5	817.4
172.5°	795.3	796.4	802.2	812.3	811.9
175°	802.6	802.6	802.6	808.5	806.5
177.5°	805.6	804.8	804.0	807.9	804.8
180°	805.6	805.6	805.6	805.6	805.6

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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	3.25	3.92	4.28	4.93	6.26	2.87	3.54	3.89	4.54	5.87
	3H	4.30	4.90	5.33	5.91	7.26	3.87	4.46	4.90	5.48	6.83
	4H	4.72	5.29	5.77	6.30	7.66	4.29	4.85	5.33	5.87	7.23
	6H	5.04	5.55	6.09	6.57	7.94	4.62	5.14	5.67	6.16	7.52
	8H	5.13	5.62	6.19	6.66	8.02	4.72	5.21	5.78	6.24	7.61
	12H	5.20	5.66	6.26	6.69	8.08	4.77	5.23	5.83	6.26	7.64
4H	2H	3.47	4.03	4.52	5.05	6.41	3.14	3.71	4.19	4.72	6.08
	3H	4.77	5.23	5.82	6.28	7.65	4.38	4.85	5.44	5.89	7.26
	4H	5.33	5.75	6.38	6.79	8.18	4.94	5.37	6.00	6.40	7.80
	6H	5.78	6.14	6.85	7.20	8.59	5.40	5.76	6.47	6.82	8.21
	8H	5.94	6.28	7.00	7.33	8.73	5.56	5.90	6.62	6.95	8.35
	12H	6.04	6.34	7.12	7.41	8.82	5.64	5.94	6.72	7.01	8.41
8H	4H	5.47	5.81	6.54	6.86	8.26	5.12	5.46	6.19	6.51	7.91
	6H	6.06	6.33	7.14	7.43	8.83	5.71	5.99	6.80	7.08	8.48
	8H	6.30	6.54	7.40	7.62	9.04	5.95	6.19	7.05	7.27	8.69
	12H	6.49	6.70	7.59	7.77	9.24	6.12	6.33	7.22	7.40	8.86
12H	4H	5.44	5.75	6.52	6.81	8.22	5.10	5.41	6.19	6.47	7.88
	6H	6.08	6.32	7.18	7.40	8.82	5.75	5.99	6.84	7.06	8.48
	8H	6.35	6.56	7.45	7.63	9.09	6.01	6.22	7.11	7.30	8.76