

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: P854481

Luminaire Tested: SQ2-WBN-125U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854481  
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-125D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

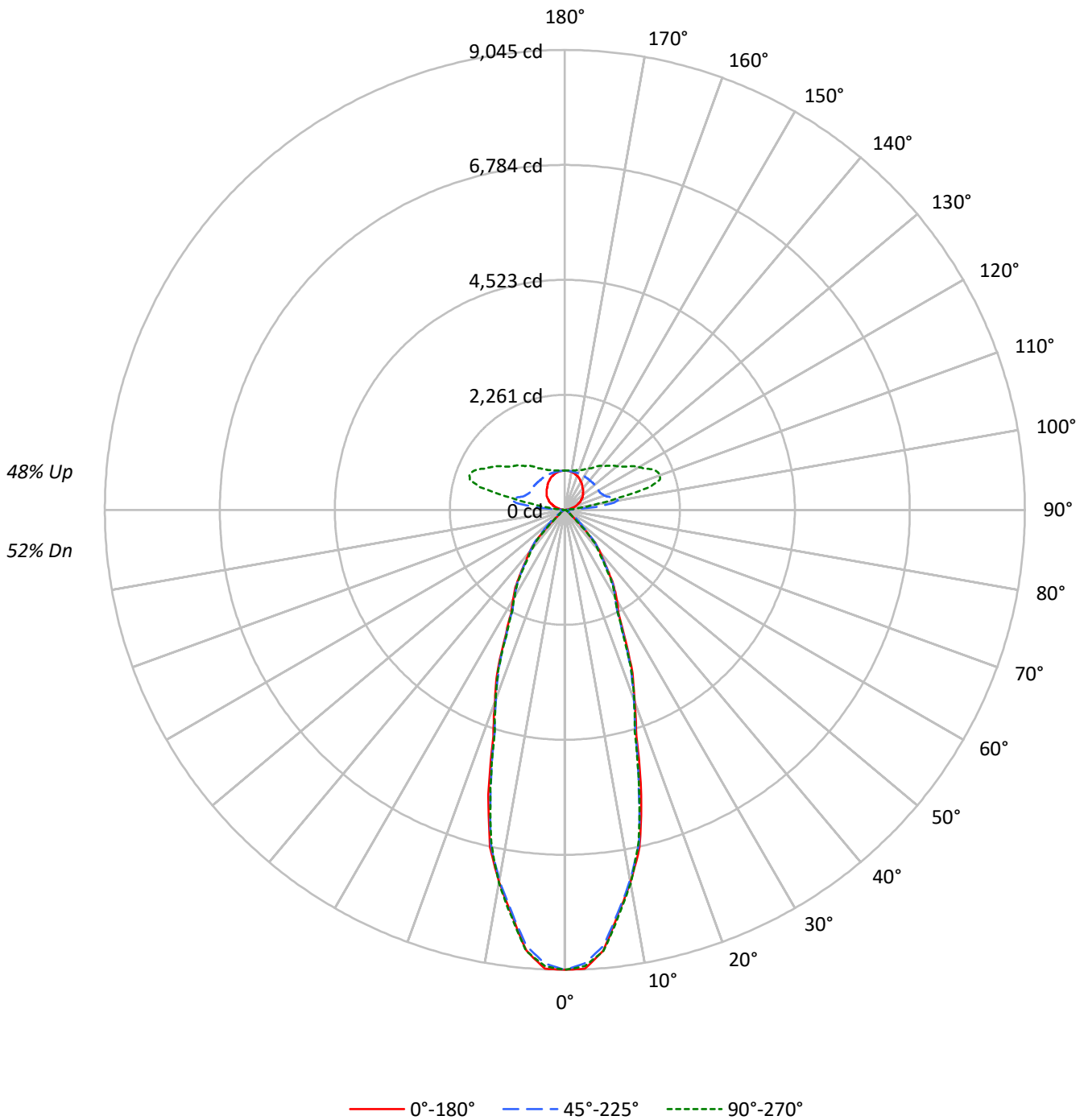
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10016.9 lumens  
Efficiency: N/A  
Efficacy: 107.0 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): 93.6  
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

TEST NUMBER: P854481

CATALOG NUMBER: SQ2-WBN-125U-125D-930-UNV-STD-W-4

### 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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52
1	101	97	94	91	93	90	88	86	78	76	74	66	65	64	55	55	54	49
2	94	88	83	79	87	82	78	75	71	69	66	61	59	58	52	51	50	45
3	88	80	74	70	82	75	70	66	66	62	59	57	55	52	49	47	46	42
4	82	73	67	62	76	69	64	59	61	57	54	53	50	48	46	44	43	39
5	77	67	61	56	72	64	58	54	56	52	49	50	47	44	44	41	40	37
6	72	62	56	51	67	59	53	49	53	48	45	47	43	41	41	39	37	35
7	68	58	51	47	64	55	49	45	49	45	41	44	41	38	39	37	35	32
8	64	54	47	43	60	51	45	41	46	42	38	41	38	36	37	35	33	31
9	61	50	44	40	57	48	42	38	43	39	36	39	36	33	35	33	31	29
10	57	47	41	37	54	45	39	36	41	37	34	37	34	31	33	31	29	27

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

	0°	45°	90°
0°	146041	146041	146041
5°	141007	139603	141164
10°	121881	121303	122172
15°	96986	93929	94305
20°	68898	67988	68484
25°	49568	48596	48254
30°	37873	36857	36767
35°	29729	29223	28464
40°	22525	22219	21138
45°	12604	15059	11248
50°	4433	9271	3908
55°	2711	5058	2576
60°	2073	2641	1918
65°	1899	1960	1777
70°	1817	1817	1666
75°	1703	1703	1603
80°	1488	1488	1488
85°	1482	1186	1186

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 15059 cd/sqm



TEST NUMBER: P854481

CATALOG NUMBER: SQ2-WBN-125U-125D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	785.1	7.8
10°-20°	1560.5	15.6
20°-30°	1292.3	12.9
30°-40°	929.7	9.3
40°-50°	473.6	4.7
50°-60°	123.3	1.2
60°-70°	51.1	0.5
70°-80°	28.4	0.3
80°-90°	9.3	0.1
90°-100°	295.3	2.9
100°-110°	961.5	9.6
110°-120°	951.1	9.5
120°-130°	777.3	7.8
130°-140°	635.3	6.3
140°-150°	494.8	4.9
150°-160°	356.7	3.6
160°-170°	218.0	2.2
170°-180°	73.6	0.7
0°-30°	3637.9	36.3
0°-40°	4567.5	45.6
0°-60°	5164.4	51.6
0°-90°	5253.2	52.4
90°-120°	2208.0	22.0
90°-150°	4115.4	41.1
90°-180°	4764.0	47.6
0°-180°	10016.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9045	9045	9045	9045	9045	
5°	8700	8688	8614	8738	8710	785
15°	5802	5736	5619	5659	5642	1575
25°	2782	2778	2728	2704	2709	1309
35°	1508	1518	1483	1458	1444	947
45°	552	635	660	613	493	441
55°	96	112	180	104	92	95
65°	50	51	51	48	46	50
75°	27	27	27	26	26	29
85°	8	8	6	8	6	8
90°	0	3	7	6	6	2
95°	40	122	541	193	119	46
105°	163	236	952	1819	1723	174
115°	302	360	776	1599	1881	299
125°	420	468	765	1262	1488	374
135°	507	560	762	1090	1229	392
145°	593	636	760	938	1028	371
155°	676	698	764	840	872	311
165°	738	744	766	795	804	208
175°	769	769	769	775	773	73
180°	772	772	772	772	772	



TEST NUMBER: P854481

CATALOG NUMBER: SQ2-WBN-125U-125D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9045.1	9045.1	9045.1	9045.1	9045.1
2.5°	9031.0	9015.9	8929.6	9001.1	8983.5
5°	8700.1	8687.6	8613.5	8738.0	8709.8
7.5°	8016.9	8027.6	7984.2	8094.2	8064.1
10°	7434.1	7462.3	7398.8	7558.4	7451.8
12.5°	6791.0	6772.8	6728.7	6753.4	6694.4
15°	5802.2	5736.3	5619.3	5659.0	5641.8
17.5°	4673.6	4699.0	4597.5	4593.2	4573.7
20°	4009.9	4017.7	3956.9	3989.0	3985.8
22.5°	3475.9	3477.4	3399.8	3446.7	3418.4
25°	2782.4	2777.7	2727.8	2703.9	2708.6
27.5°	2281.7	2262.3	2224.6	2240.4	2228.8
30°	2031.4	2015.7	1976.9	1986.2	1972.1
32.5°	1806.8	1807.4	1767.6	1762.9	1752.5
35°	1508.3	1517.7	1482.6	1458.3	1444.1
37.5°	1242.0	1250.7	1221.1	1185.5	1173.6
40°	1068.7	1074.9	1054.2	1012.3	1002.9
42.5°	880.0	906.3	886.1	846.4	825.7
45°	552.0	635.1	659.5	613.4	492.6
47.5°	279.2	394.4	470.5	347.4	228.8
50°	176.5	256.5	369.1	209.0	155.6
52.5°	135.4	176.5	294.6	154.3	124.8
55°	96.3	112.0	179.7	104.0	91.5
57.5°	74.5	83.2	107.5	78.8	70.9
60°	64.2	70.5	81.8	67.2	59.4
62.5°	57.8	61.5	66.4	57.1	54.2
65°	49.7	51.3	51.3	48.1	46.5
67.5°	42.4	43.9	43.6	42.0	40.4
70°	38.5	40.1	38.5	36.9	35.3
72.5°	33.4	34.9	33.4	33.0	31.5
75°	27.3	27.3	27.3	25.7	25.7
77.5°	21.2	21.5	19.9	19.9	18.6
80°	16.0	17.6	16.0	16.0	16.0
82.5°	13.5	13.8	12.2	12.2	12.2
85°	8.0	8.0	6.4	8.0	6.4
87.5°	2.6	3.1	3.9	3.7	3.7
90°	0.0	2.8	6.6	5.7	5.7
92.5°	13.7	49.1	157.1	51.8	39.9
95°	39.9	121.6	541.3	193.0	118.7
97.5°	75.0	158.2	918.7	559.5	341.5
100°	97.8	179.5	1060.8	945.9	613.5
102.5°	123.6	202.4	1043.3	1399.4	1064.0
105°	163.3	235.8	952.5	1819.3	1722.7
107.5°	206.3	274.4	866.3	1855.7	1958.1
110°	237.4	299.6	825.3	1810.5	1995.3



TEST NUMBER: P854481

CATALOG NUMBER: SQ2-WBN-125U-125D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	263.3	324.7	799.4	1728.9	1967.2
115°	302.0	360.5	775.9	1599.0	1881.3
117.5°	341.9	394.6	766.8	1480.1	1761.1
120°	364.7	416.7	764.5	1407.0	1679.1
122.5°	386.7	438.0	765.3	1343.5	1597.0
125°	419.8	468.0	765.4	1262.5	1488.2
127.5°	448.1	497.5	765.3	1201.8	1390.0
130°	466.3	516.4	764.5	1167.2	1335.3
132.5°	482.3	534.6	763.7	1135.0	1292.7
135°	507.1	560.1	761.7	1089.6	1228.9
137.5°	531.4	584.7	759.6	1043.5	1167.2
140°	548.9	600.0	758.8	1012.2	1129.2
142.5°	565.6	614.5	758.8	982.3	1086.6
145°	592.6	636.2	759.8	938.4	1027.6
147.5°	618.8	656.7	761.1	901.1	970.0
150°	636.3	669.7	762.6	878.8	937.3
152.5°	653.8	681.3	763.4	861.9	908.5
155°	676.2	698.5	764.5	840.2	871.8
157.5°	697.5	713.4	765.6	824.3	846.4
160°	710.4	723.4	766.4	814.3	831.9
162.5°	721.8	731.8	766.4	805.8	819.0
165°	737.9	744.4	766.4	795.1	804.4
167.5°	749.3	753.4	766.6	787.0	791.9
170°	756.9	758.8	767.3	781.6	783.5
172.5°	762.2	763.3	768.9	778.5	778.2
175°	769.2	769.2	769.2	774.9	773.0
177.5°	772.1	771.4	770.6	774.3	771.3
180°	772.1	772.1	772.1	772.1	772.1

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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	4.45	5.14	5.43	6.10	7.35	4.06	4.75	5.04	5.71	6.97
	3H	5.49	6.11	6.48	7.08	8.35	5.06	5.67	6.05	6.64	7.92
	4H	5.92	6.50	6.92	7.47	8.76	5.48	6.06	6.48	7.03	8.32
	6H	6.23	6.76	7.24	7.74	9.03	5.81	6.34	6.82	7.32	8.62
	8H	6.33	6.83	7.34	7.82	9.12	5.91	6.41	6.93	7.41	8.70
	12H	6.39	6.87	7.41	7.86	9.17	5.96	6.44	6.98	7.42	8.74
4H	2H	4.66	5.24	5.67	6.22	7.50	4.33	4.91	5.34	5.89	7.17
	3H	5.96	6.44	6.97	7.44	8.74	5.58	6.06	6.59	7.06	8.35
	4H	6.52	6.96	7.54	7.96	9.28	6.13	6.57	7.15	7.57	8.89
	6H	6.97	7.35	8.00	8.37	9.68	6.59	6.96	7.62	7.98	9.30
	8H	7.13	7.48	8.16	8.49	9.82	6.75	7.09	7.77	8.11	9.44
	12H	7.23	7.54	8.27	8.57	9.90	6.83	7.14	7.87	8.17	9.50
8H	4H	6.66	7.01	7.69	8.02	9.35	6.32	6.66	7.34	7.67	9.00
	6H	7.25	7.53	8.30	8.59	9.91	6.90	7.18	7.95	8.24	9.56
	8H	7.49	7.74	8.55	8.78	10.13	7.14	7.39	8.20	8.43	9.78
	12H	7.68	7.90	8.74	8.93	10.32	7.31	7.52	8.36	8.56	9.95
12H	4H	6.64	6.95	7.68	7.98	9.31	6.30	6.61	7.34	7.64	8.97
	6H	7.27	7.52	8.33	8.56	9.91	6.93	7.18	7.99	8.22	9.57
	8H	7.54	7.76	8.60	8.79	10.18	7.20	7.42	8.26	8.45	9.84