

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: P854250

Luminaire Tested: SQ2-PW1-025U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854250  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PW1-025U-100D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

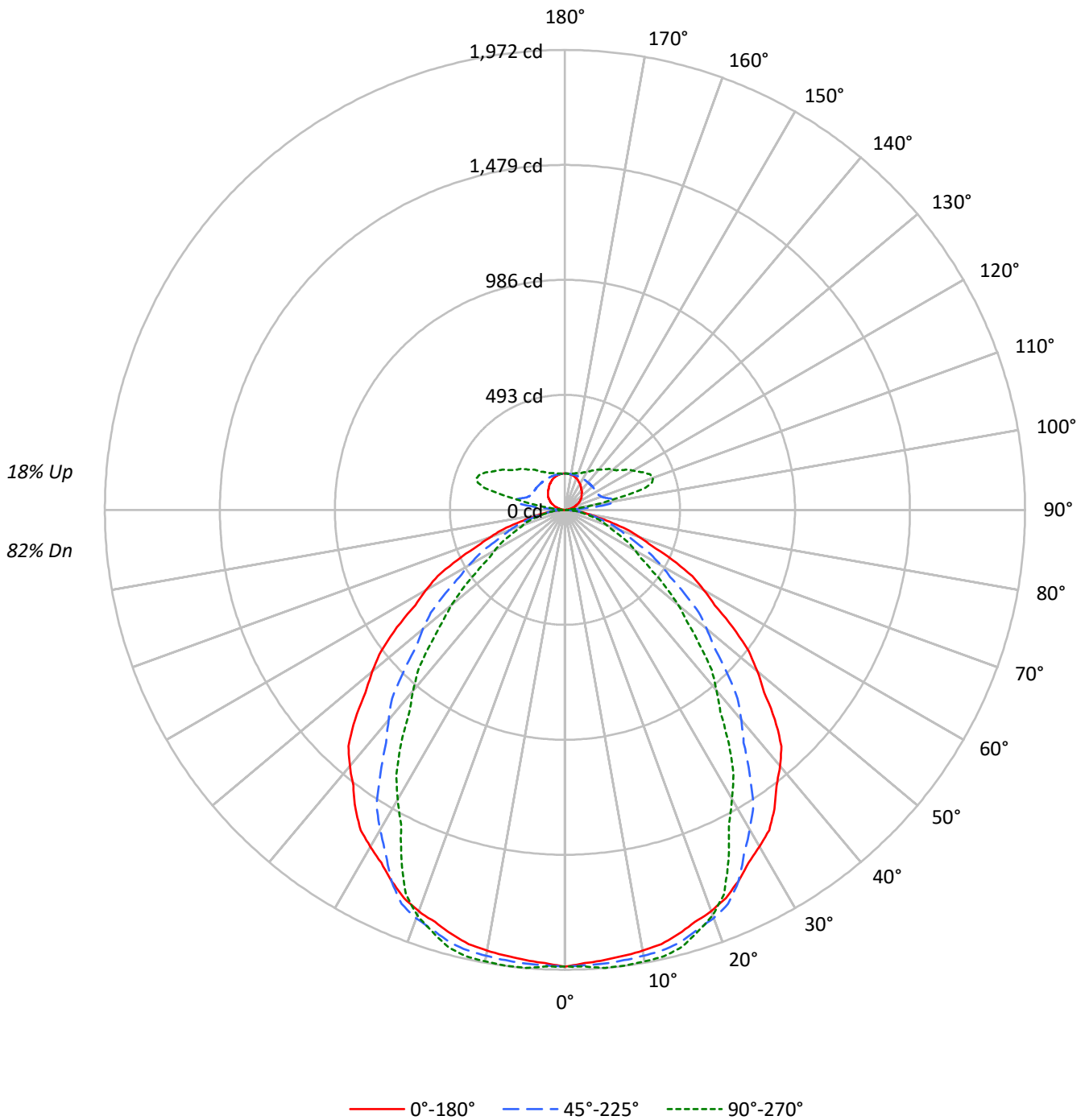
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5311.1 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 45  
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
RCR																				
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	85	85	82
1	106	102	98	95	101	98	94	91	90	88	85	83	81	80	77	75	74	74	74	71
2	97	90	84	79	93	87	81	77	80	76	72	74	71	68	69	66	64	64	64	61
3	89	80	73	67	85	77	71	65	72	66	62	67	62	59	62	58	55	55	55	53
4	82	72	64	58	79	69	62	56	64	58	54	60	55	51	56	52	49	49	49	46
5	76	64	56	50	73	62	55	49	58	52	47	54	49	45	51	46	43	43	43	40
6	70	58	50	44	67	56	49	43	53	46	42	50	44	40	46	42	38	38	38	36
7	65	53	45	39	63	51	44	39	48	42	37	45	40	36	43	38	34	34	34	32
8	61	49	41	35	59	47	40	35	44	38	33	42	36	32	39	35	31	31	31	29
9	57	45	37	32	55	43	36	31	41	35	30	39	33	29	37	32	28	28	28	26
10	54	41	34	29	51	40	33	29	38	32	28	36	31	27	34	29	26	26	26	24

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

	0°	45°	90°
0°	31625	31625	31625
5°	31413	31657	31958
10°	31472	31839	32236
15°	31463	32055	32430
20°	31476	32020	31797
25°	31306	31338	29544
30°	31092	29528	26711
35°	30849	27173	24122
40°	30237	24770	21311
45°	29051	22277	18614
50°	27038	19914	15933
55°	24732	17591	12918
60°	22168	15300	11144
65°	19385	13184	9906
70°	15852	11712	8984
75°	12333	10125	8259
80°	9196	8675	7280
85°	6224	6558	4150

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 29051 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.5	3.5
10°-20°	540.4	10.2
20°-30°	795.3	15.0
30°-40°	869.5	16.4
40°-50°	780.0	14.7
50°-60°	581.8	11.0
60°-70°	367.7	6.9
70°-80°	182.2	3.4
80°-90°	43.0	0.8
90°-100°	62.9	1.2
100°-110°	195.6	3.7
110°-120°	191.4	3.6
120°-130°	156.3	2.9
130°-140°	127.8	2.4
140°-150°	99.8	1.9
150°-160°	72.0	1.4
160°-170°	44.0	0.8
170°-180°	14.8	0.3
0°-30°	1522.2	28.7
0°-40°	2391.7	45.0
0°-60°	3753.6	70.7
0°-90°	4346.5	81.8
90°-120°	450.0	8.5
90°-150°	833.8	15.7
90°-180°	965.0	18.2
0°-180°	5311.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1959	1959	1959	1959	1959	
5°	1938	1969	1953	1955	1972	184
15°	1882	1919	1918	1931	1940	531
25°	1757	1796	1759	1686	1658	809
35°	1565	1549	1379	1258	1224	976
45°	1272	1170	976	854	815	976
55°	879	795	625	490	459	785
65°	507	466	345	278	259	503
75°	198	212	162	136	132	218
85°	34	43	35	24	22	43
90°	0	1	3	3	3	2
95°	9	25	115	43	28	10
105°	34	48	193	368	351	36
115°	61	72	156	323	378	60
125°	85	94	154	254	298	75
135°	102	113	154	219	246	79
145°	119	128	154	189	206	75
155°	136	141	154	170	176	63
165°	150	151	155	160	162	42
175°	155	155	155	156	155	15
180°	155	155	155	155	155	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1958.7	1958.7	1958.7	1958.7	1958.7
2.5°	1945.3	1970.1	1954.3	1955.9	1960.2
5°	1938.2	1969.2	1953.2	1955.4	1971.8
7.5°	1928.5	1959.9	1947.9	1954.6	1970.7
10°	1919.6	1952.4	1942.0	1951.6	1966.2
12.5°	1907.6	1941.9	1934.5	1945.6	1960.2
15°	1882.3	1918.7	1917.7	1931.0	1940.1
17.5°	1852.8	1889.3	1887.5	1890.9	1895.3
20°	1831.9	1868.4	1863.6	1850.6	1850.6
22.5°	1802.0	1841.4	1829.3	1793.6	1781.9
25°	1757.3	1795.6	1759.1	1685.8	1658.4
27.5°	1705.0	1736.1	1662.9	1558.7	1520.7
30°	1667.7	1691.4	1583.8	1469.2	1432.7
32.5°	1628.9	1638.1	1503.2	1384.0	1344.6
35°	1565.1	1548.7	1378.6	1258.4	1223.8
37.5°	1489.8	1440.9	1258.8	1133.0	1094.7
40°	1434.6	1365.2	1175.2	1049.4	1011.1
42.5°	1373.4	1286.5	1096.2	970.3	930.5
45°	1272.3	1170.1	975.6	853.5	815.2
47.5°	1158.5	1057.0	863.0	744.7	711.9
50°	1076.4	977.9	792.8	674.4	634.3
52.5°	992.8	904.5	724.2	602.4	547.7
55°	878.6	794.7	624.9	489.9	458.9
57.5°	761.1	688.5	535.0	412.4	386.9
60°	686.5	622.7	473.8	370.6	345.1
62.5°	614.9	558.3	414.1	331.9	310.8
65°	507.4	465.5	345.1	277.5	259.3
67.5°	402.9	379.6	286.9	227.7	215.6
70°	335.8	328.5	248.1	199.4	190.3
72.5°	277.6	280.5	210.8	172.6	166.4
75°	197.7	212.3	162.3	136.1	132.4
77.5°	134.7	156.6	120.1	100.7	97.8
80°	98.9	120.8	93.3	78.3	78.3
82.5°	69.0	86.5	66.4	58.9	58.9
85°	33.6	42.7	35.4	24.2	22.4
87.5°	9.0	13.5	6.5	5.0	5.0
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.7	36.4	12.0	9.7
95°	8.6	25.4	115.4	42.6	27.7
97.5°	15.6	33.0	191.1	119.0	75.0
100°	21.0	36.8	215.5	201.6	134.5
102.5°	26.3	41.4	210.9	287.9	226.0
105°	34.3	48.3	192.6	367.7	350.9
107.5°	42.3	55.4	175.1	373.8	392.3
110°	47.7	60.7	165.9	365.1	401.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	53.0	65.3	161.3	349.3	395.4
115°	61.0	72.2	156.4	322.6	377.6
117.5°	68.8	79.1	154.3	297.1	353.4
120°	73.4	83.7	153.5	282.5	336.6
122.5°	78.0	88.3	154.3	270.2	319.8
125°	84.9	94.2	154.5	253.7	297.5
127.5°	90.4	99.9	154.5	241.3	278.6
130°	93.5	103.7	154.5	234.4	268.0
132.5°	97.3	107.5	153.7	228.2	259.6
135°	102.0	113.2	153.5	219.0	246.0
137.5°	107.6	117.8	153.5	209.8	234.4
140°	110.6	120.9	153.5	203.6	226.0
142.5°	114.4	123.9	153.5	197.5	217.6
145°	119.2	128.5	153.5	189.2	206.0
147.5°	124.9	132.9	154.5	181.5	194.7
150°	128.7	135.3	154.5	177.6	187.9
152.5°	131.8	137.6	154.5	173.8	182.5
155°	136.4	141.0	154.5	169.9	175.5
157.5°	140.9	144.5	154.5	166.4	169.9
160°	144.0	146.8	154.5	164.1	166.9
162.5°	146.3	148.3	154.5	162.5	164.6
165°	149.7	150.6	155.4	160.2	162.1
167.5°	151.8	152.0	154.5	158.9	159.8
170°	152.6	153.5	154.5	157.4	158.3
172.5°	154.1	154.3	155.2	156.6	156.8
175°	155.4	155.4	155.4	156.4	155.4
177.5°	155.4	155.4	155.4	155.4	155.4
180°	155.4	155.4	155.4	155.4	155.4

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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	21.65	22.82	22.28	23.46	24.19	18.13	19.30	18.77	19.94	20.67
	3H	22.99	24.04	23.64	24.69	25.46	19.36	20.41	20.01	21.06	21.83
	4H	23.38	24.36	24.05	25.03	25.81	19.82	20.81	20.49	21.47	22.25
	6H	23.60	24.50	24.28	25.18	25.97	20.16	21.06	20.84	21.73	22.53
	8H	23.64	24.50	24.33	25.20	26.00	20.24	21.10	20.93	21.79	22.59
	12H	23.65	24.47	24.34	25.16	25.98	20.26	21.08	20.96	21.77	22.59
4H	2H	21.79	22.77	22.46	23.43	24.22	18.85	19.84	19.52	20.50	21.28
	3H	23.36	24.17	24.04	24.88	25.68	20.27	21.08	20.95	21.78	22.59
	4H	23.88	24.62	24.58	25.32	26.15	20.83	21.56	21.53	22.27	23.10
	6H	24.23	24.86	24.95	25.60	26.44	21.25	21.88	21.97	22.61	23.46
	8H	24.31	24.91	25.04	25.63	26.49	21.36	21.95	22.08	22.68	23.53
	12H	24.34	24.87	25.09	25.63	26.48	21.39	21.93	22.14	22.68	23.54
8H	4H	23.94	24.54	24.67	25.26	26.12	21.18	21.77	21.90	22.50	23.35
	6H	24.39	24.88	25.14	25.65	26.50	21.69	22.18	22.45	22.95	23.81
	8H	24.53	24.97	25.30	25.74	26.61	21.86	22.29	22.62	23.07	23.94
	12H	24.61	25.00	25.38	25.76	26.69	21.93	22.31	22.70	23.07	24.01
12H	4H	23.91	24.45	24.66	25.20	26.06	21.21	21.74	21.95	22.49	23.35
	6H	24.38	24.82	25.15	25.59	26.46	21.76	22.19	22.52	22.97	23.84
	8H	24.56	24.94	25.32	25.70	26.63	21.96	22.34	22.72	23.10	24.04