

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: P854134

Luminaire Tested: SQ2-PP3-100U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854134  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-100U-125D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

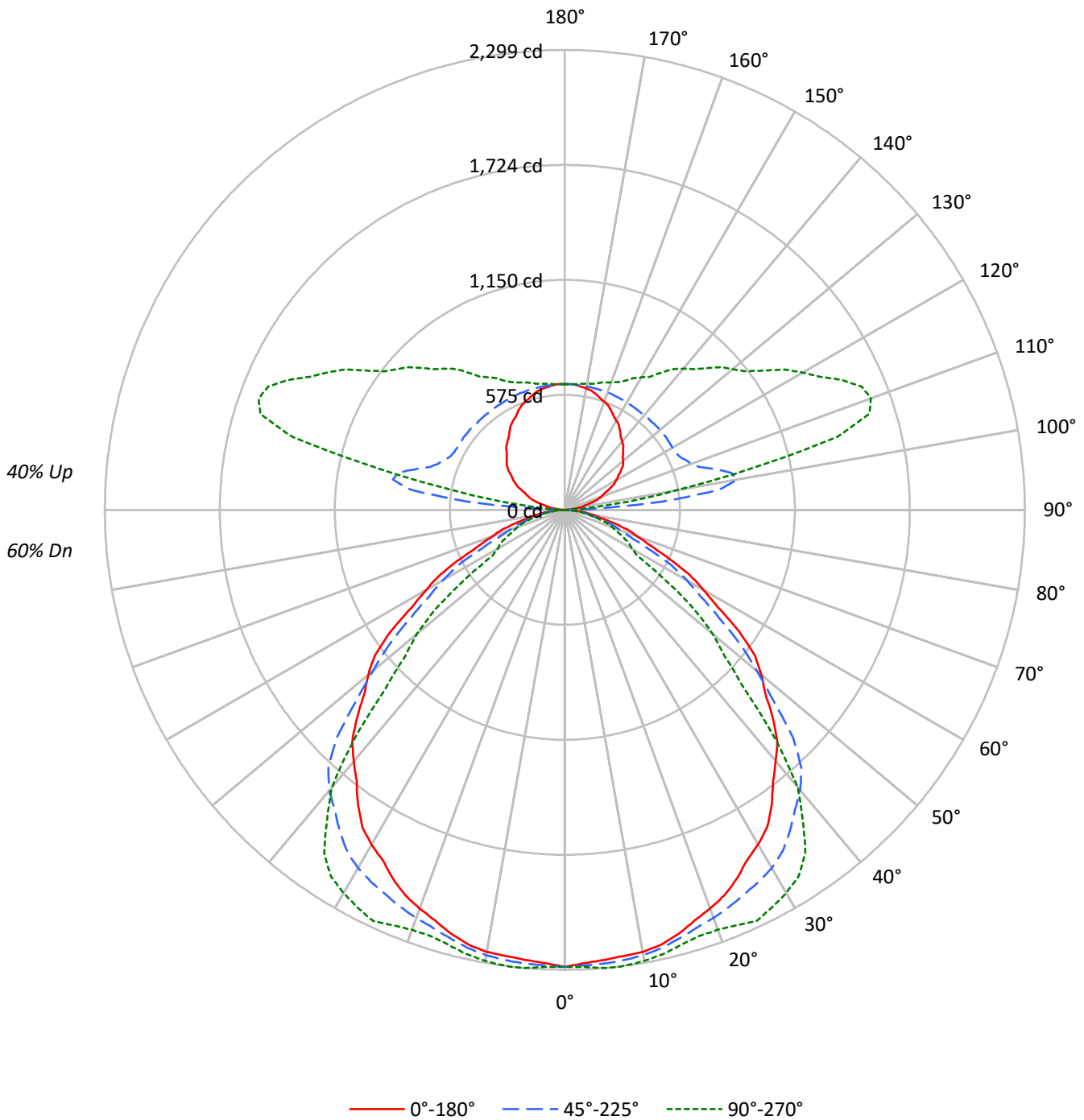
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9668.7 lumens  
Efficiency: N/A  
Efficacy: 118.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 81.8  
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60				
1	101	96	93	89	94	90	87	84	79	76	74	68	66	65	58	57	56	51				
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	52	50	48	44				
3	84	75	68	62	79	71	64	59	62	57	53	54	50	47	47	44	42	38				
4	77	67	59	53	72	63	56	51	55	50	46	48	44	41	42	39	36	33				
5	71	60	52	46	66	56	49	44	50	44	40	44	39	36	38	35	32	29				
6	66	54	46	40	61	51	44	38	45	39	35	40	35	31	35	31	28	25				
7	61	49	41	35	57	46	39	34	41	35	31	36	31	28	32	28	25	23				
8	57	44	37	31	53	42	35	30	37	32	27	33	28	25	29	25	23	20				
9	53	41	33	28	49	38	32	27	34	29	25	30	26	23	27	23	20	18				
10	49	37	30	25	46	35	29	24	32	26	22	28	24	20	25	21	19	17				

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

	0°	45°	90°
0°	36887	36887	36887
5°	36598	36911	37263
10°	36784	37061	37536
15°	36695	37058	37623
20°	36433	37304	38383
25°	36227	37775	40399
30°	36019	38542	41243
35°	35510	38652	41319
40°	34562	38583	38177
45°	33529	36838	29060
50°	32212	31423	24204
55°	29979	26446	17405
60°	25814	22695	12478
65°	21776	17532	12271
70°	18128	13794	11745
75°	15365	11903	10998
80°	13027	10330	9884
85°	10282	8503	5372

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 36838 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.5	2.2
10°-20°	629.6	6.5
20°-30°	986.3	10.2
30°-40°	1216.8	12.6
40°-50°	1145.6	11.8
50°-60°	811.1	8.4
60°-70°	462.2	4.8
70°-80°	228.7	2.4
80°-90°	57.0	0.6
90°-100°	262.6	2.7
100°-110°	794.4	8.2
110°-120°	775.4	8.0
120°-130°	633.7	6.6
130°-140°	517.2	5.3
140°-150°	402.6	4.2
150°-160°	290.3	3.0
160°-170°	177.7	1.8
170°-180°	60.0	0.6
0°-30°	1833.5	19.0
0°-40°	3050.2	31.5
0°-60°	5006.9	51.8
0°-90°	5754.8	59.5
90°-120°	1832.4	19.0
90°-150°	3386.0	35.0
90°-180°	3914.0	40.5
0°-180°	9668.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2258	2298	2277	2283	2299	215
15°	2195	2226	2217	2239	2251	619
25°	2034	2085	2120	2206	2268	937
35°	1802	1851	1961	2073	2096	1124
45°	1468	1579	1613	1367	1273	1130
55°	1065	1129	940	708	618	940
65°	570	601	459	324	321	572
75°	246	272	191	179	176	267
85°	56	51	46	36	29	65
90°	0	2	12	7	6	4
95°	33	103	496	183	116	39
105°	138	194	780	1481	1408	145
115°	246	293	631	1305	1533	243
125°	344	381	622	1031	1213	305
135°	412	455	618	889	1000	319
145°	481	516	618	765	836	301
155°	548	566	622	686	712	252
165°	599	606	625	649	656	169
175°	627	627	628	633	631	59
180°	629	629	629	629	629	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2284.6	2284.6	2284.6	2284.6	2284.6
2.5°	2267.3	2299.4	2278.8	2282.8	2286.6
5°	2258.1	2298.2	2277.4	2282.6	2299.1
7.5°	2249.4	2290.5	2270.2	2278.8	2299.1
10°	2243.6	2279.0	2260.5	2272.9	2289.5
12.5°	2226.2	2259.7	2243.1	2259.4	2274.0
15°	2195.3	2226.0	2217.0	2239.0	2250.8
17.5°	2153.3	2190.6	2190.5	2221.6	2233.9
20°	2120.4	2165.3	2171.1	2210.3	2233.9
22.5°	2085.6	2138.1	2147.9	2206.8	2247.5
25°	2033.5	2085.4	2120.4	2206.3	2267.7
27.5°	1972.6	2024.1	2096.3	2192.5	2241.2
30°	1932.0	1981.6	2067.3	2167.3	2212.2
32.5°	1881.8	1933.3	2024.8	2132.5	2173.5
35°	1801.6	1851.2	1961.0	2072.7	2096.3
37.5°	1709.4	1765.6	1888.6	1950.9	1952.3
40°	1639.8	1713.0	1830.6	1842.0	1811.3
42.5°	1572.2	1666.2	1749.5	1698.5	1562.1
45°	1468.4	1579.3	1613.3	1367.2	1272.7
47.5°	1357.7	1467.3	1413.3	1146.6	1081.5
50°	1282.4	1386.3	1251.0	1025.0	963.6
52.5°	1197.4	1290.0	1106.1	908.4	814.8
55°	1065.0	1128.8	939.5	708.0	618.3
57.5°	905.6	950.5	803.2	531.4	430.8
60°	799.4	834.8	702.8	436.0	386.4
62.5°	702.8	734.4	598.5	378.8	361.3
65°	570.0	600.7	458.9	323.6	321.2
67.5°	453.5	487.1	352.1	282.5	279.7
70°	384.0	419.4	292.2	253.5	248.8
72.5°	326.0	359.6	247.8	222.6	219.8
75°	246.3	272.3	190.8	178.7	176.3
77.5°	178.7	195.2	142.0	135.7	133.3
80°	140.1	147.2	111.1	108.6	106.3
82.5°	105.3	102.9	84.0	81.5	77.3
85°	55.5	50.8	45.9	36.1	29.0
87.5°	17.4	17.8	10.1	7.2	7.0
90°	0.0	1.9	11.8	6.9	5.9
92.5°	11.1	44.7	160.3	53.2	38.3
95°	32.6	103.0	495.6	183.1	115.5
97.5°	63.0	131.1	781.1	516.9	314.7
100°	81.9	148.5	872.7	843.7	566.7
102.5°	103.3	167.6	853.8	1183.4	943.4
105°	138.2	194.2	779.9	1481.2	1407.8
107.5°	171.4	224.9	708.9	1510.7	1595.6
110°	193.5	244.7	673.3	1473.5	1628.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	214.8	264.4	652.0	1411.3	1606.7
115°	245.8	293.1	630.9	1305.4	1533.2
117.5°	276.6	321.4	623.4	1206.2	1439.4
120°	297.2	339.6	621.0	1148.3	1372.3
122.5°	316.1	356.3	621.0	1097.4	1304.4
125°	343.6	381.2	622.0	1030.9	1213.3
127.5°	365.9	404.9	621.0	980.7	1136.3
130°	380.1	420.6	621.0	952.0	1092.9
132.5°	392.7	434.0	620.2	925.7	1055.8
135°	411.7	455.1	618.0	889.1	1000.1
137.5°	432.8	474.1	618.0	850.0	952.9
140°	446.2	486.8	618.0	824.6	922.1
142.5°	459.7	498.7	617.2	801.4	886.6
145°	480.8	516.5	618.0	764.8	836.2
147.5°	501.9	532.2	619.2	734.6	789.4
150°	515.4	543.3	620.0	717.8	764.1
152.5°	528.0	552.9	620.8	703.4	741.2
155°	547.9	566.3	622.0	685.8	711.8
157.5°	565.3	580.2	623.2	672.7	690.9
160°	575.6	588.1	623.9	664.7	678.2
162.5°	585.8	595.3	624.7	657.6	668.8
165°	599.3	606.0	624.9	648.8	656.5
167.5°	610.7	614.2	626.1	642.0	645.3
170°	617.0	619.0	626.9	638.8	639.7
172.5°	621.0	622.1	626.9	635.6	635.8
175°	626.9	626.9	627.9	632.8	630.9
177.5°	629.7	628.9	628.1	630.4	628.9
180°	628.9	628.9	628.9	628.9	628.9



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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	20.92	21.84	21.80	22.73	23.86	17.32	18.23	18.20	19.13	20.26
	3H	22.02	22.84	22.91	23.74	24.90	18.43	19.24	19.32	20.15	21.30
	4H	22.37	23.14	23.27	24.05	25.21	18.89	19.66	19.80	20.57	21.74
	6H	22.58	23.29	23.50	24.21	25.39	19.24	19.95	20.16	20.87	22.05
	8H	22.64	23.31	23.56	24.24	25.42	19.33	20.00	20.25	20.93	22.11
	12H	22.65	23.29	23.58	24.22	25.42	19.34	19.99	20.28	20.91	22.12
4H	2H	21.04	21.81	21.95	22.72	23.88	18.04	18.81	18.95	19.72	20.89
	3H	22.35	22.99	23.27	23.93	25.11	19.29	19.93	20.22	20.87	22.05
	4H	22.83	23.41	23.76	24.34	25.55	19.85	20.43	20.78	21.37	22.58
	6H	23.17	23.67	24.11	24.63	25.83	20.30	20.79	21.24	21.75	22.96
	8H	23.26	23.73	24.21	24.68	25.90	20.42	20.88	21.37	21.84	23.06
	12H	23.30	23.72	24.27	24.69	25.92	20.45	20.87	21.42	21.84	23.06
8H	4H	22.85	23.31	23.80	24.27	25.49	20.13	20.59	21.08	21.55	22.77
	6H	23.28	23.67	24.26	24.66	25.88	20.68	21.06	21.65	22.06	23.28
	8H	23.44	23.78	24.42	24.76	26.00	20.86	21.20	21.85	22.19	23.43
	12H	23.53	23.83	24.51	24.81	26.09	20.94	21.24	21.92	22.22	23.50
12H	4H	22.81	23.23	23.78	24.20	25.43	20.14	20.56	21.11	21.53	22.76
	6H	23.27	23.61	24.25	24.60	25.84	20.73	21.07	21.71	22.05	23.29
	8H	23.44	23.74	24.43	24.72	26.01	20.94	21.24	21.93	22.22	23.50