

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: P854109

Luminaire Tested: SQ2-PP3-075U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854109  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-075U-125D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

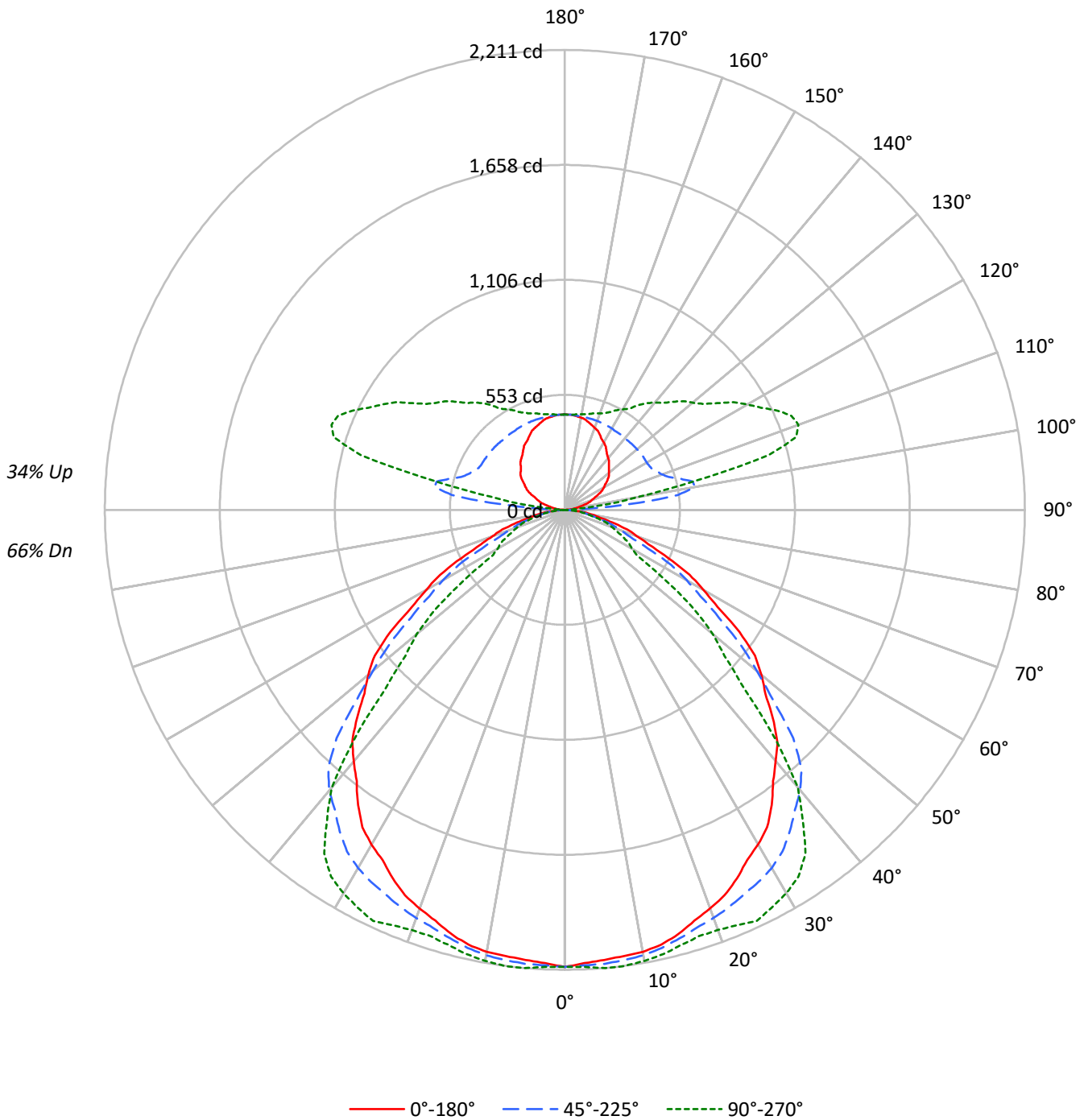
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8374.2 lumens  
Efficiency: N/A  
Efficacy: 115.5 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: Semi-Direct  
  
Input Watts (W): 72.5  
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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66				
1	102	98	94	91	96	92	89	86	82	80	77	73	71	69	64	63	61	57				
2	94	86	80	75	88	82	76	72	73	69	65	65	62	59	57	55	53	49				
3	86	76	69	64	81	72	66	61	65	60	56	58	54	50	51	48	46	42				
4	79	68	60	54	74	65	58	52	58	52	48	52	47	44	46	43	40	37				
5	72	61	53	47	68	58	51	45	52	46	42	47	42	38	42	38	35	32				
6	67	55	47	41	63	52	45	40	47	41	37	42	37	34	38	34	31	28				
7	62	50	42	36	58	47	40	35	43	37	32	39	34	30	35	31	28	25				
8	58	45	38	32	54	43	36	31	39	33	29	35	30	27	32	28	25	23				
9	54	41	34	29	51	40	33	28	36	30	26	33	28	24	29	25	22	20				
10	50	38	31	26	47	36	30	25	33	27	24	30	25	22	27	23	20	18				

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

	0°	45°	90°
0°	35479	35479	35479
5°	35199	35501	35840
10°	35379	35644	36102
15°	35293	35642	36186
20°	35041	35880	36917
25°	34843	36332	38856
30°	34644	37069	39668
35°	34154	37176	39740
40°	33242	37110	36718
45°	32248	35429	27951
50°	30981	30223	23280
55°	28836	25436	16738
60°	24826	21826	12000
65°	20944	16860	11801
70°	17434	13270	11292
75°	14778	11447	10580
80°	12524	9930	9503
85°	9892	8170	5169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 35429 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.2	2.5
10°-20°	605.5	7.2
20°-30°	948.7	11.3
30°-40°	1170.3	14.0
40°-50°	1101.8	13.2
50°-60°	780.1	9.3
60°-70°	444.5	5.3
70°-80°	219.9	2.6
80°-90°	54.2	0.6
90°-100°	173.5	2.1
100°-110°	575.1	6.9
110°-120°	570.7	6.8
120°-130°	464.9	5.6
130°-140°	377.8	4.5
140°-150°	293.4	3.5
150°-160°	211.4	2.5
160°-170°	129.5	1.5
170°-180°	43.7	0.5
0°-30°	1763.4	21.1
0°-40°	2933.7	35.0
0°-60°	4815.6	57.5
0°-90°	5534.2	66.1
90°-120°	1319.3	15.8
90°-150°	2455.4	29.3
90°-180°	2840.0	33.9
0°-180°	8374.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2172	2210	2190	2195	2211	207
15°	2111	2141	2132	2154	2165	595
25°	1956	2006	2039	2122	2181	901
35°	1733	1780	1886	1994	2016	1081
45°	1412	1519	1552	1315	1224	1087
55°	1024	1086	904	681	595	904
65°	548	578	441	311	309	550
75°	237	262	184	172	170	257
85°	53	49	44	35	28	63
90°	0	1	3	4	4	3
95°	25	73	314	112	75	28
105°	101	143	576	1086	1015	106
115°	180	215	463	965	1128	177
125°	251	279	455	758	894	223
135°	300	331	451	650	734	232
145°	348	374	450	560	612	219
155°	398	412	453	500	518	183
165°	437	442	455	473	478	123
175°	457	457	458	461	460	43
180°	459	459	459	459	459	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2197.4	2197.4	2197.4	2197.4	2197.4
2.5°	2180.6	2211.5	2191.8	2195.6	2199.2
5°	2171.8	2210.4	2190.4	2195.4	2211.3
7.5°	2163.5	2203.0	2183.4	2191.8	2211.3
10°	2157.9	2191.9	2174.1	2186.1	2202.0
12.5°	2141.2	2173.4	2157.4	2173.1	2187.1
15°	2111.4	2140.9	2132.3	2153.5	2164.8
17.5°	2071.0	2106.9	2106.8	2136.8	2148.6
20°	2039.4	2082.6	2088.2	2125.9	2148.6
22.5°	2006.0	2056.4	2065.9	2122.5	2161.6
25°	1955.8	2005.8	2039.4	2122.1	2181.1
27.5°	1897.3	1946.8	2016.2	2108.8	2155.6
30°	1858.2	1905.9	1988.3	2084.5	2127.7
32.5°	1809.9	1859.4	1947.4	2051.0	2090.5
35°	1732.8	1780.5	1886.1	1993.5	2016.2
37.5°	1644.1	1698.1	1816.4	1876.4	1877.7
40°	1577.2	1647.6	1760.7	1771.6	1742.1
42.5°	1512.1	1602.5	1682.6	1633.7	1502.4
45°	1412.3	1519.0	1551.6	1315.0	1224.1
47.5°	1305.9	1411.3	1359.3	1102.8	1040.1
50°	1233.4	1333.3	1203.2	985.8	926.8
52.5°	1151.6	1240.7	1063.8	873.6	783.7
55°	1024.4	1085.7	903.6	680.9	594.6
57.5°	871.0	914.2	772.6	511.1	414.4
60°	768.8	802.9	675.9	419.3	371.6
62.5°	675.9	706.4	575.6	364.3	347.5
65°	548.2	577.7	441.3	311.2	308.9
67.5°	436.2	468.5	338.7	271.7	269.0
70°	369.3	403.4	281.1	243.8	239.2
72.5°	313.6	345.8	238.3	214.1	211.4
75°	236.9	261.9	183.5	171.8	169.6
77.5°	171.9	187.8	136.6	130.5	128.2
80°	134.7	141.5	106.8	104.5	102.2
82.5°	101.3	99.0	80.8	78.4	74.3
85°	53.4	48.9	44.1	34.7	27.9
87.5°	16.7	16.9	8.0	6.3	6.3
90°	0.0	0.9	2.8	3.8	3.8
92.5°	7.6	29.3	86.4	28.0	23.6
95°	24.7	73.0	314.3	112.2	75.0
97.5°	45.4	95.9	548.7	320.0	202.3
100°	59.8	108.1	635.3	545.7	361.8
102.5°	75.8	122.6	630.0	833.9	630.0
105°	100.7	143.4	575.5	1085.8	1015.2
107.5°	126.1	164.2	523.3	1111.4	1165.1
110°	140.6	178.6	496.7	1086.1	1194.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	155.7	193.1	480.7	1041.1	1179.5
115°	179.5	214.8	463.4	964.8	1128.2
117.5°	203.0	234.4	457.2	891.8	1063.3
120°	217.5	248.1	454.9	846.1	1012.4
122.5°	230.4	260.3	454.9	808.6	962.2
125°	250.7	278.6	454.9	758.1	893.6
127.5°	267.4	294.7	453.8	719.8	835.7
130°	277.3	306.1	453.0	697.5	801.5
132.5°	286.4	316.0	452.2	679.1	772.7
135°	300.1	330.7	451.1	650.5	734.1
137.5°	314.9	344.4	450.0	623.0	696.7
140°	324.8	353.6	449.2	604.6	672.4
142.5°	333.9	362.0	450.0	586.2	646.5
145°	348.5	374.5	450.1	559.6	612.5
147.5°	364.3	386.0	450.3	537.1	576.5
150°	374.2	393.7	451.1	524.0	557.5
152.5°	383.3	402.0	451.9	513.2	540.0
155°	397.9	411.8	453.0	500.0	518.5
157.5°	412.2	422.9	454.1	490.5	503.7
160°	419.8	429.0	454.9	483.6	493.8
162.5°	427.4	434.4	454.9	479.0	487.0
165°	436.9	441.5	454.9	473.0	477.7
167.5°	445.6	448.0	455.8	467.7	470.1
170°	450.1	451.1	455.8	465.4	466.3
172.5°	453.2	454.1	456.6	463.1	463.3
175°	456.8	456.8	457.7	460.6	459.6
177.5°	458.7	458.7	457.9	459.4	457.9
180°	458.7	458.7	458.7	458.7	458.7

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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	21.32	22.31	22.14	23.14	24.16	17.72	18.70	18.53	19.53	20.56
	3H	22.43	23.31	23.26	24.15	25.20	18.83	19.71	19.66	20.55	21.60
	4H	22.78	23.60	23.62	24.45	25.52	19.30	20.13	20.15	20.98	22.04
	6H	23.00	23.76	23.86	24.61	25.69	19.66	20.42	20.51	21.27	22.35
	8H	23.05	23.77	23.92	24.65	25.72	19.75	20.47	20.61	21.34	22.42
	12H	23.07	23.76	23.94	24.62	25.73	19.76	20.45	20.63	21.32	22.42
4H	2H	21.45	22.27	22.30	23.12	24.19	18.45	19.28	19.30	20.12	21.19
	3H	22.77	23.45	23.63	24.33	25.41	19.71	20.40	20.57	21.28	22.36
	4H	23.25	23.87	24.12	24.75	25.85	20.27	20.89	21.14	21.77	22.88
	6H	23.59	24.13	24.48	25.03	26.14	20.72	21.25	21.61	22.15	23.27
	8H	23.69	24.19	24.58	25.08	26.21	20.84	21.34	21.73	22.24	23.36
	12H	23.73	24.18	24.64	25.09	26.22	20.88	21.32	21.79	22.24	23.37
8H	4H	23.27	23.77	24.17	24.67	25.79	20.55	21.05	21.44	21.95	23.07
	6H	23.71	24.12	24.63	25.06	26.18	21.10	21.52	22.02	22.45	23.58
	8H	23.87	24.23	24.79	25.16	26.30	21.29	21.66	22.22	22.59	23.73
	12H	23.96	24.28	24.89	25.20	26.40	21.37	21.69	22.30	22.61	23.81
12H	4H	23.24	23.69	24.15	24.60	25.73	20.57	21.02	21.48	21.93	23.06
	6H	23.70	24.06	24.63	25.00	26.14	21.16	21.52	22.08	22.45	23.59
	8H	23.87	24.20	24.80	25.12	26.31	21.37	21.69	22.30	22.62	23.81