

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: P854928

Luminaire Tested: SQ2-PP3-075U-125D-830-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854928  
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-830-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

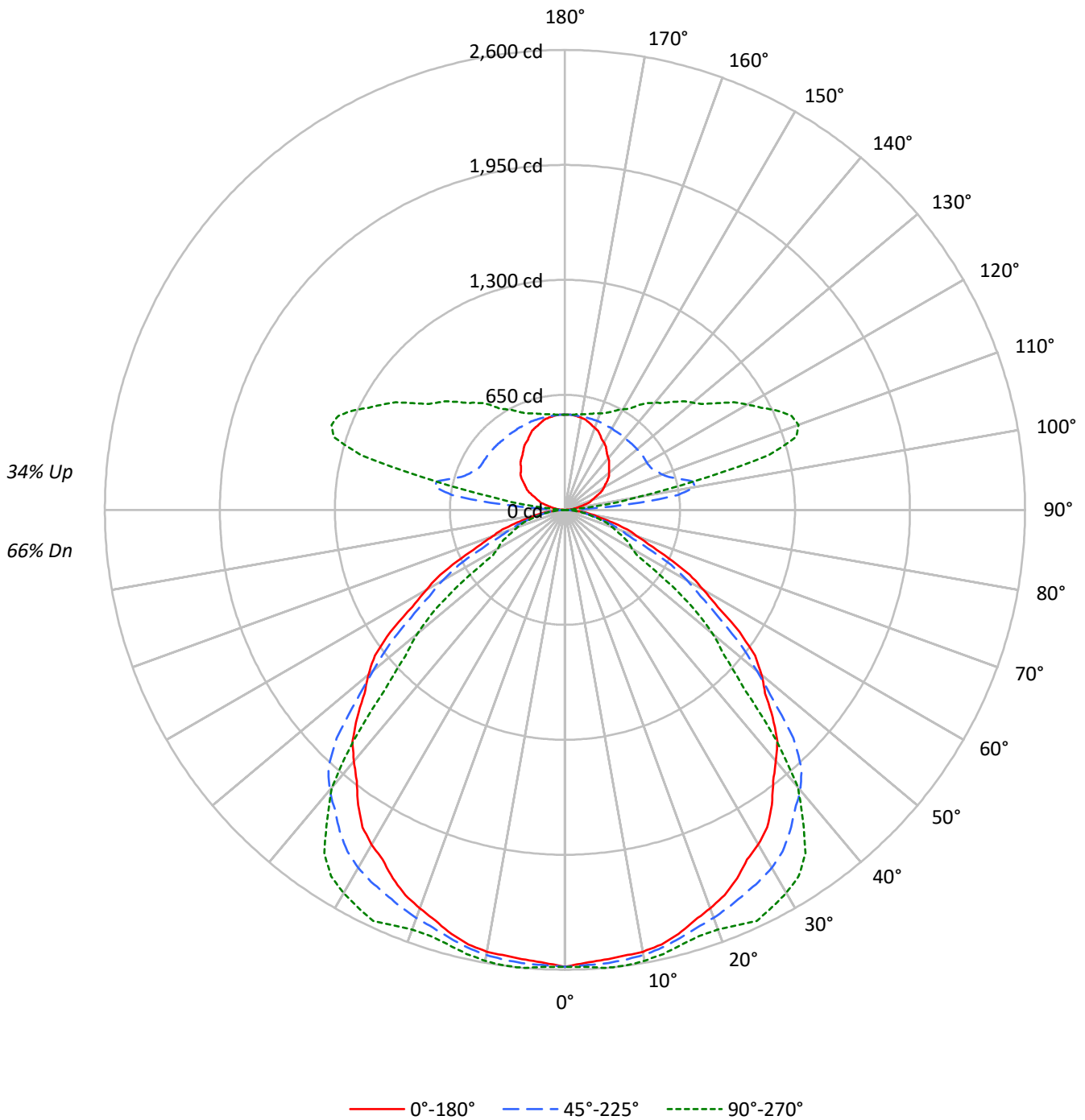
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9844.4 lumens  
Efficiency: N/A  
Efficacy: 135.8 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°	41706	41706	41706
5°	41379	41733	42131
10°	41589	41902	42440
15°	41489	41899	42539
20°	41192	42177	43397
25°	40960	42710	45678
30°	40725	43578	46631
35°	40150	43702	46718
40°	39077	43625	43163
45°	37908	41651	32858
50°	36419	35528	27367
55°	33895	29900	19679
60°	29185	25659	14108
65°	24623	19824	13876
70°	20497	15597	13279
75°	17374	13456	12433
80°	14728	11678	11176
85°	11634	9615	6076

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 41651 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.0	2.5
10°-20°	711.8	7.2
20°-30°	1115.2	11.3
30°-40°	1375.7	14.0
40°-50°	1295.3	13.2
50°-60°	917.1	9.3
60°-70°	522.6	5.3
70°-80°	258.5	2.6
80°-90°	63.7	0.6
90°-100°	203.9	2.1
100°-110°	676.0	6.9
110°-120°	670.9	6.8
120°-130°	546.5	5.6
130°-140°	444.1	4.5
140°-150°	344.9	3.5
150°-160°	248.5	2.5
160°-170°	152.2	1.5
170°-180°	51.4	0.5
0°-30°	2073.0	21.1
0°-40°	3448.7	35.0
0°-60°	5661.0	57.5
0°-90°	6505.8	66.1
90°-120°	1550.9	15.8
90°-150°	2886.4	29.3
90°-180°	3339.0	33.9
0°-180°	9844.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2583	2583	2583	2583	2583	
5°	2553	2598	2575	2581	2600	243
15°	2482	2517	2507	2532	2545	699
25°	2299	2358	2397	2494	2564	1059
35°	2037	2093	2217	2344	2370	1270
45°	1660	1786	1824	1546	1439	1278
55°	1204	1276	1062	800	699	1062
65°	644	679	519	366	363	647
75°	278	308	216	202	199	302
85°	63	57	52	41	33	74
90°	0	1	3	4	4	4
95°	29	86	370	132	88	33
105°	118	169	677	1276	1193	125
115°	211	252	545	1134	1326	209
125°	295	327	535	891	1050	262
135°	353	389	530	765	863	273
145°	410	440	529	658	720	257
155°	468	484	532	588	610	216
165°	514	519	535	556	562	145
175°	537	537	538	542	540	51
180°	539	539	539	539	539	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2583.1	2583.1	2583.1	2583.1	2583.1
2.5°	2563.5	2599.8	2576.5	2581.0	2585.3
5°	2553.1	2598.4	2574.9	2580.8	2599.5
7.5°	2543.3	2589.7	2566.8	2576.5	2599.5
10°	2536.7	2576.7	2555.8	2569.8	2588.6
12.5°	2517.0	2554.9	2536.1	2554.6	2571.1
15°	2482.1	2516.8	2506.6	2531.5	2544.9
17.5°	2434.6	2476.8	2476.7	2511.8	2525.7
20°	2397.4	2448.2	2454.7	2499.1	2525.7
22.5°	2358.1	2417.4	2428.5	2495.1	2541.1
25°	2299.2	2357.8	2397.4	2494.5	2564.0
27.5°	2230.3	2288.5	2370.2	2478.9	2534.0
30°	2184.4	2240.5	2337.4	2450.4	2501.2
32.5°	2127.6	2185.9	2289.3	2411.1	2457.5
35°	2037.0	2093.0	2217.2	2343.5	2370.2
37.5°	1932.7	1996.3	2135.3	2205.8	2207.4
40°	1854.0	1936.8	2069.8	2082.6	2047.9
42.5°	1777.6	1883.9	1978.1	1920.4	1766.2
45°	1660.2	1785.6	1824.1	1545.8	1439.0
47.5°	1535.1	1659.0	1597.9	1296.4	1222.8
50°	1449.9	1567.4	1414.4	1158.9	1089.5
52.5°	1353.8	1458.5	1250.6	1027.1	921.2
55°	1204.1	1276.3	1062.2	800.5	699.1
57.5°	1023.9	1074.7	908.1	600.8	487.1
60°	903.8	943.9	794.6	493.0	436.9
62.5°	794.6	830.3	676.7	428.3	408.5
65°	644.5	679.2	518.9	365.9	363.2
67.5°	512.7	550.7	398.1	319.4	316.2
70°	434.2	474.2	330.4	286.6	281.3
72.5°	368.6	406.6	280.2	251.7	248.5
75°	278.5	307.9	215.7	202.0	199.3
77.5°	202.0	220.7	160.6	153.4	150.7
80°	158.4	166.4	125.6	122.8	120.2
82.5°	119.1	116.3	95.0	92.1	87.4
85°	62.8	57.4	51.9	40.8	32.8
87.5°	19.7	19.9	9.4	7.5	7.5
90°	0.0	1.1	3.4	4.4	4.4
92.5°	8.9	34.5	101.6	32.9	27.7
95°	29.1	85.8	369.5	131.8	88.2
97.5°	53.4	112.7	645.0	376.2	237.8
100°	70.3	127.1	746.9	641.5	425.3
102.5°	89.1	144.2	740.6	980.4	740.6
105°	118.4	168.6	676.6	1276.4	1193.4
107.5°	148.2	193.0	615.2	1306.5	1369.5
110°	165.2	210.0	583.9	1276.7	1404.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	183.1	226.9	565.1	1223.9	1386.6
115°	211.0	252.5	544.9	1134.1	1326.2
117.5°	238.7	275.5	537.4	1048.4	1249.9
120°	255.6	291.7	534.8	994.7	1190.1
122.5°	270.8	306.0	534.8	950.5	1131.1
125°	294.8	327.4	534.8	891.2	1050.5
127.5°	314.4	346.4	533.4	846.2	982.4
130°	326.0	359.9	532.5	819.9	942.3
132.5°	336.7	371.4	531.6	798.2	908.2
135°	352.8	388.8	530.3	764.8	863.0
137.5°	370.2	404.9	528.9	732.3	819.0
140°	381.8	415.6	528.0	710.7	790.4
142.5°	392.6	425.5	528.9	689.1	760.0
145°	409.7	440.3	529.1	657.8	720.1
147.5°	428.3	453.8	529.4	631.4	677.7
150°	439.8	462.8	530.3	616.0	655.3
152.5°	450.6	472.6	531.2	603.3	634.7
155°	467.7	484.1	532.5	587.7	609.5
157.5°	484.5	497.1	533.9	576.6	592.1
160°	493.4	504.4	534.8	568.5	580.5
162.5°	502.3	510.7	534.8	563.1	572.4
165°	513.5	519.0	534.8	556.1	561.6
167.5°	523.8	526.7	535.9	549.8	552.7
170°	529.1	530.3	535.9	547.0	548.1
172.5°	532.8	533.9	536.7	544.4	544.6
175°	536.9	536.9	538.1	541.5	540.3
177.5°	539.2	539.2	538.3	540.1	538.3
180°	539.2	539.2	539.2	539.2	539.2



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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	21.89	22.87	22.70	23.70	24.72	18.28	19.27	19.10	20.10	21.12
	3H	22.99	23.87	23.82	24.71	25.76	19.40	20.27	20.22	21.11	22.17
	4H	23.34	24.17	24.18	25.01	26.08	19.87	20.69	20.71	21.54	22.60
	6H	23.56	24.32	24.42	25.18	26.25	20.22	20.98	21.07	21.83	22.91
	8H	23.61	24.34	24.48	25.21	26.29	20.31	21.03	21.17	21.90	22.98
	12H	23.63	24.32	24.50	25.19	26.29	20.33	21.01	21.20	21.88	22.98
4H	2H	22.01	22.84	22.86	23.68	24.75	19.01	19.84	19.86	20.69	21.75
	3H	23.33	24.01	24.19	24.90	25.97	20.28	20.96	21.13	21.84	22.92
	4H	23.81	24.43	24.68	25.31	26.41	20.84	21.45	21.71	22.33	23.44
	6H	24.15	24.69	25.04	25.59	26.70	21.28	21.82	22.17	22.72	23.83
	8H	24.25	24.75	25.14	25.65	26.77	21.41	21.90	22.30	22.80	23.92
	12H	24.29	24.74	25.20	25.66	26.78	21.44	21.89	22.35	22.80	23.93
8H	4H	23.84	24.34	24.73	25.23	26.35	21.12	21.62	22.01	22.51	23.63
	6H	24.27	24.68	25.19	25.62	26.75	21.67	22.08	22.58	23.02	24.14
	8H	24.43	24.79	25.36	25.73	26.87	21.85	22.22	22.78	23.15	24.29
	12H	24.52	24.84	25.45	25.77	26.96	21.93	22.25	22.86	23.18	24.37
12H	4H	23.80	24.25	24.71	25.17	26.29	21.13	21.58	22.04	22.49	23.62
	6H	24.26	24.63	25.19	25.56	26.70	21.72	22.08	22.65	23.02	24.16
	8H	24.44	24.76	25.37	25.68	26.87	21.93	22.26	22.86	23.18	24.37