

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: P854278

Luminaire Tested: SQ2-PW1-075U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854278  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PW1-075U-125D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

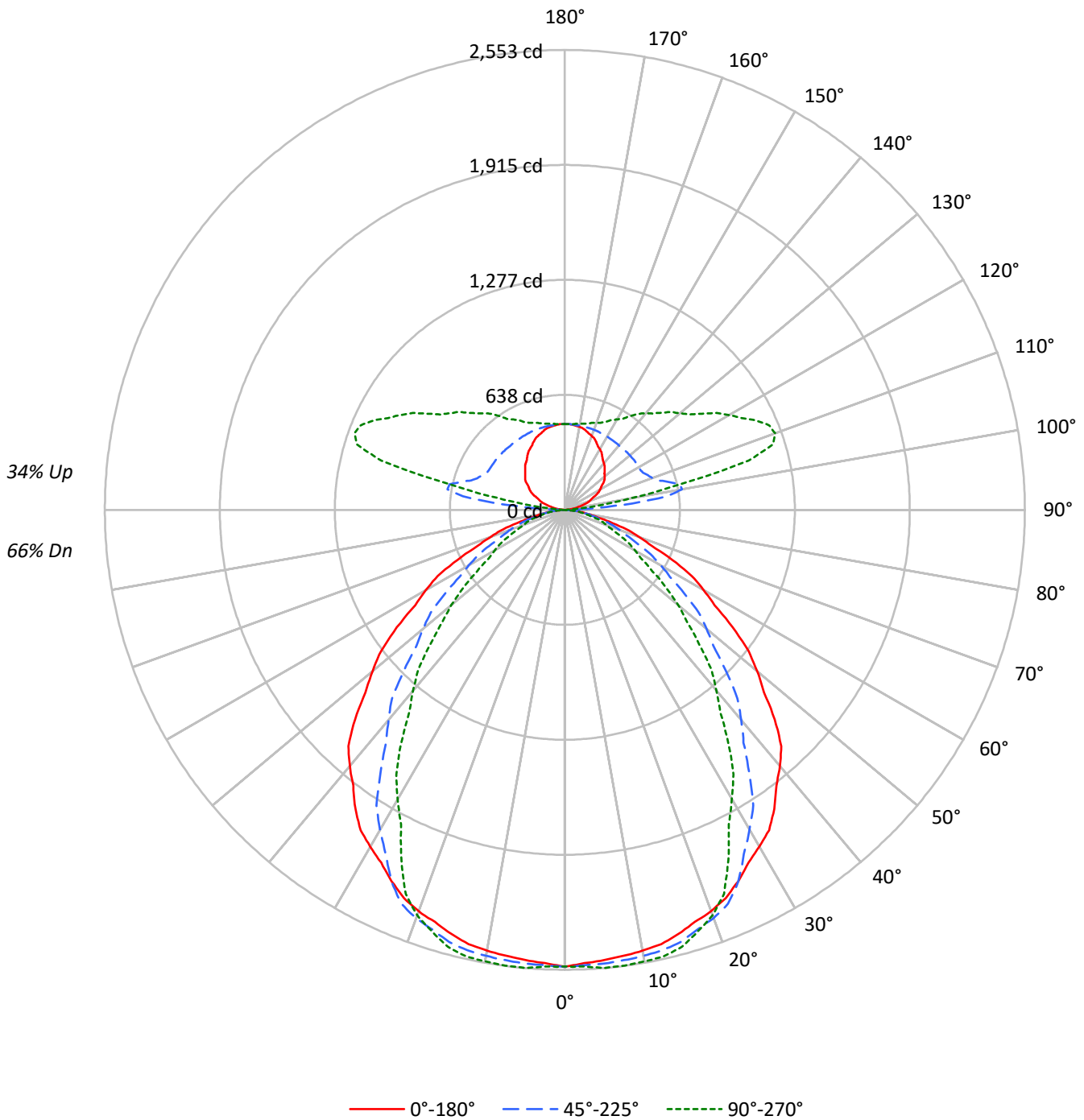
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8579.8 lumens  
Efficiency: N/A  
Efficacy: 118.3 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): 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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	102	98	94	91	96	92	89	86	82	80	77	72	71	69	63	62	61	57
2	94	86	80	76	88	82	76	72	73	69	65	64	61	59	57	55	53	49
3	86	77	70	64	81	73	66	61	65	60	56	58	54	51	51	48	46	42
4	79	68	61	55	74	65	58	53	58	53	48	52	48	44	46	43	40	37
5	73	61	53	47	68	58	51	46	52	47	42	47	42	39	42	38	35	32
6	67	55	47	42	63	53	45	40	48	42	37	43	38	34	38	34	31	29
7	62	50	42	37	59	48	41	36	43	37	33	39	34	31	35	31	28	26
8	58	46	38	33	55	44	37	32	40	34	30	36	31	28	32	28	25	23
9	54	42	35	30	51	40	33	29	37	31	27	33	28	25	30	26	23	21
10	51	39	32	27	48	37	30	26	34	28	24	31	26	23	28	24	21	19

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

	0°	45°	90°
0°	40943	40943	40943
5°	40670	40982	41373
10°	40743	41218	41733
15°	40732	41499	41984
20°	40749	41453	41163
25°	40529	40572	38249
30°	40253	38227	34580
35°	39937	35177	31227
40°	39144	32068	27590
45°	37609	28841	24099
50°	35003	25782	20625
55°	32020	22773	16724
60°	28698	19808	14428
65°	25096	17070	12825
70°	20521	15163	11627
75°	15970	13107	10699
80°	11901	11232	9428
85°	8058	8503	5372

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 37609 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.5	2.8
10°-20°	699.6	8.2
20°-30°	1029.6	12.0
30°-40°	1125.7	13.1
40°-50°	1009.8	11.8
50°-60°	753.3	8.8
60°-70°	476.0	5.5
70°-80°	235.8	2.7
80°-90°	55.7	0.6
90°-100°	180.4	2.1
100°-110°	597.9	7.0
110°-120°	593.4	6.9
120°-130°	483.3	5.6
130°-140°	392.8	4.6
140°-150°	305.1	3.6
150°-160°	219.8	2.6
160°-170°	134.6	1.6
170°-180°	45.5	0.5
0°-30°	1970.7	23.0
0°-40°	3096.4	36.1
0°-60°	4859.5	56.6
0°-90°	5627.0	65.6
90°-120°	1371.7	16.0
90°-150°	2552.9	29.8
90°-180°	2953.0	34.4
0°-180°	8579.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2536	2536	2536	2536	2536	
5°	2509	2549	2529	2532	2553	239
15°	2437	2484	2483	2500	2512	688
25°	2275	2325	2277	2182	2147	1048
35°	2026	2005	1785	1629	1584	1264
45°	1647	1515	1263	1105	1055	1263
55°	1138	1029	809	634	594	1016
65°	657	603	447	359	336	651
75°	256	275	210	176	172	282
85°	44	55	46	31	29	55
90°	0	1	3	4	4	3
95°	26	76	327	117	78	29
105°	105	149	598	1129	1056	110
115°	187	223	482	1003	1173	184
125°	261	290	473	788	929	232
135°	312	344	469	676	763	241
145°	362	389	468	582	637	227
155°	414	428	471	520	539	191
165°	454	459	473	492	497	128
175°	475	475	476	479	478	45
180°	477	477	477	477	477	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2535.8	2535.8	2535.8	2535.8	2535.8
2.5°	2518.4	2550.5	2530.0	2532.1	2537.7
5°	2509.3	2549.4	2528.6	2531.5	2552.7
7.5°	2496.7	2537.3	2521.8	2530.5	2551.3
10°	2485.1	2527.6	2514.1	2526.6	2545.5
12.5°	2469.6	2514.0	2504.4	2518.9	2537.7
15°	2436.8	2484.0	2482.7	2499.9	2511.7
17.5°	2398.6	2445.9	2443.6	2448.0	2453.7
20°	2371.6	2418.8	2412.6	2395.7	2395.7
22.5°	2333.0	2384.0	2368.2	2322.0	2306.9
25°	2275.0	2324.6	2277.4	2182.4	2147.0
27.5°	2207.4	2247.5	2152.8	2017.9	1968.8
30°	2159.1	2189.8	2050.4	1902.0	1854.8
32.5°	2108.8	2120.6	1946.1	1791.8	1740.8
35°	2026.2	2005.0	1784.7	1629.1	1584.3
37.5°	1928.7	1865.4	1629.7	1466.7	1417.2
40°	1857.2	1767.5	1521.5	1358.6	1309.0
42.5°	1778.0	1665.6	1419.1	1256.1	1204.6
45°	1647.1	1514.8	1263.1	1105.0	1055.4
47.5°	1499.8	1368.5	1117.2	964.1	921.6
50°	1393.5	1266.0	1026.4	873.1	821.1
52.5°	1285.3	1171.0	937.5	779.9	709.1
55°	1137.5	1028.9	809.0	634.2	594.1
57.5°	985.3	891.4	692.6	533.9	500.9
60°	888.7	806.1	613.4	479.8	446.8
62.5°	796.0	722.8	536.1	429.7	402.3
65°	656.9	602.6	446.8	359.3	335.7
67.5°	521.7	491.4	371.4	294.8	279.2
70°	434.7	425.3	321.2	258.1	246.3
72.5°	359.4	363.1	272.9	223.5	215.4
75°	256.0	274.9	210.1	176.2	171.5
77.5°	174.4	202.7	155.5	130.3	126.5
80°	128.0	156.3	120.8	101.4	101.4
82.5°	89.4	112.0	86.0	76.3	76.3
85°	43.5	55.3	45.9	31.3	29.0
87.5°	11.6	17.5	8.3	6.6	6.6
90°	0.0	1.0	3.0	3.9	3.9
92.5°	7.9	30.5	89.9	29.1	24.5
95°	25.7	75.9	326.8	116.6	78.0
97.5°	47.2	99.7	570.5	332.7	210.3
100°	62.2	112.4	660.6	567.4	376.2
102.5°	78.8	127.5	655.0	867.1	655.0
105°	104.7	149.1	598.4	1128.9	1055.5
107.5°	131.1	170.7	544.1	1155.5	1211.3
110°	146.1	185.7	516.4	1129.2	1242.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	161.9	200.7	499.8	1082.5	1226.4
115°	186.6	223.3	481.9	1003.1	1173.0
117.5°	211.1	243.7	475.3	927.3	1105.5
120°	226.1	258.0	473.0	879.8	1052.6
122.5°	239.5	270.6	473.0	840.7	1000.4
125°	260.7	289.6	473.0	788.2	929.1
127.5°	278.1	306.4	471.8	748.4	868.9
130°	288.3	318.3	471.0	725.2	833.4
132.5°	297.8	328.5	470.2	706.0	803.3
135°	312.0	343.9	469.0	676.4	763.3
137.5°	327.4	358.1	467.8	647.7	724.4
140°	337.7	367.6	467.0	628.6	699.1
142.5°	347.2	376.3	467.8	609.5	672.2
145°	362.4	389.4	468.0	581.8	636.9
147.5°	378.8	401.4	468.2	558.4	599.4
150°	389.0	409.3	469.0	544.8	579.6
152.5°	398.5	418.0	469.8	533.6	561.4
155°	413.7	428.2	471.0	519.8	539.1
157.5°	428.5	439.7	472.2	510.0	523.7
160°	436.4	446.1	473.0	502.8	513.4
162.5°	444.3	451.7	473.0	498.0	506.3
165°	454.2	459.0	473.0	491.8	496.7
167.5°	463.3	465.8	474.0	486.3	488.8
170°	468.0	469.0	474.0	483.8	484.8
172.5°	471.2	472.2	474.7	481.5	481.7
175°	474.9	474.9	475.9	478.9	477.9
177.5°	476.9	476.9	476.1	477.7	476.1
180°	476.9	476.9	476.9	476.9	476.9

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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	21.30	22.27	22.12	23.10	24.13	17.78	18.75	18.60	19.59	20.62
	3H	22.63	23.49	23.46	24.34	25.40	19.00	19.86	19.83	20.71	21.77
	4H	23.01	23.82	23.86	24.67	25.75	19.45	20.26	20.30	21.12	22.19
	6H	23.22	23.97	24.08	24.83	25.91	19.77	20.52	20.63	21.38	22.47
	8H	23.25	23.96	24.12	24.84	25.93	19.85	20.56	20.72	21.44	22.53
	12H	23.25	23.93	24.13	24.80	25.91	19.87	20.54	20.74	21.41	22.53
4H	2H	21.42	22.23	22.27	23.08	24.15	18.48	19.29	19.34	20.15	21.22
	3H	22.97	23.64	23.84	24.53	25.62	19.88	20.55	20.74	21.44	22.53
	4H	23.48	24.10	24.36	24.98	26.09	20.43	21.04	21.31	21.92	23.04
	6H	23.82	24.35	24.71	25.25	26.37	20.84	21.37	21.73	22.27	23.39
	8H	23.90	24.39	24.80	25.29	26.42	20.95	21.44	21.84	22.34	23.47
	12H	23.92	24.36	24.83	25.28	26.42	20.97	21.42	21.89	22.34	23.47
8H	4H	23.53	24.02	24.42	24.92	26.05	20.76	21.26	21.66	22.16	23.29
	6H	23.97	24.38	24.89	25.32	26.45	21.27	21.68	22.19	22.62	23.75
	8H	24.11	24.47	25.05	25.41	26.56	21.44	21.80	22.37	22.73	23.88
	12H	24.18	24.50	25.12	25.43	26.63	21.50	21.82	22.43	22.74	23.94
12H	4H	23.49	23.94	24.41	24.86	25.99	20.78	21.23	21.70	22.15	23.28
	6H	23.96	24.32	24.89	25.26	26.40	21.34	21.70	22.27	22.63	23.78
	8H	24.13	24.44	25.06	25.37	26.57	21.53	21.85	22.46	22.77	23.97