

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: P854277

Luminaire Tested: SQ2-PW1-075U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854277  
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-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: -

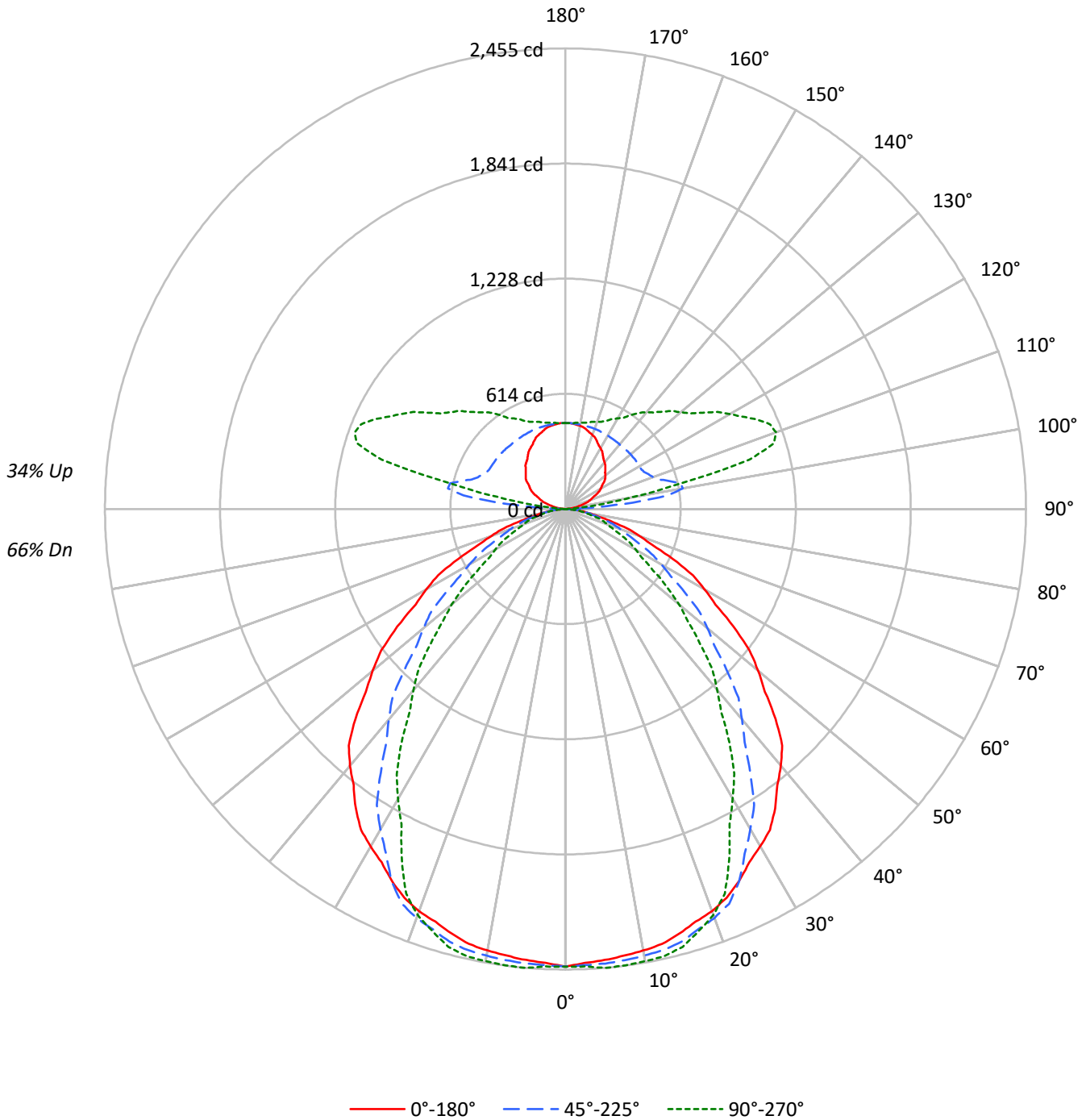
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8252.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

TEST NUMBER: P854277

CATALOG NUMBER: SQ2-PW1-075U-125D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854277

CATALOG NUMBER: SQ2-PW1-075U-125D-930-UNV-STD-W-4

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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°	39378	39378	39378
5°	39115	39417	39793
10°	39187	39643	40138
15°	39176	39913	40379
20°	39192	39871	39591
25°	38981	39022	36788
30°	38715	36767	33258
35°	38412	33835	30035
40°	37648	30844	26536
45°	36173	27738	23178
50°	33666	24797	19839
55°	30795	21903	16085
60°	27603	19052	13876
65°	24137	16416	12336
70°	19737	14582	11183
75°	15359	12608	10287
80°	11446	10795	9075
85°	7744	8170	5169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 36173 cd/sqm



TEST NUMBER: P854277

CATALOG NUMBER: SQ2-PW1-075U-125D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.2	2.8
10°-20°	672.9	8.2
20°-30°	990.3	12.0
30°-40°	1082.7	13.1
40°-50°	971.3	11.8
50°-60°	724.5	8.8
60°-70°	457.9	5.5
70°-80°	226.8	2.7
80°-90°	53.5	0.6
90°-100°	173.5	2.1
100°-110°	575.1	7.0
110°-120°	570.7	6.9
120°-130°	464.9	5.6
130°-140°	377.8	4.6
140°-150°	293.4	3.6
150°-160°	211.4	2.6
160°-170°	129.5	1.6
170°-180°	43.7	0.5
0°-30°	1895.4	23.0
0°-40°	2978.1	36.1
0°-60°	4673.8	56.6
0°-90°	5412.0	65.6
90°-120°	1319.3	16.0
90°-150°	2455.4	29.8
90°-180°	2840.0	34.4
0°-180°	8252.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2439	2439	2439	2439	2439	
5°	2413	2452	2432	2435	2455	230
15°	2344	2389	2388	2404	2416	662
25°	2188	2236	2190	2099	2065	1008
35°	1949	1928	1717	1567	1524	1215
45°	1584	1457	1215	1063	1015	1215
55°	1094	990	778	610	571	977
65°	632	580	430	346	323	626
75°	246	264	202	170	165	271
85°	42	53	44	30	28	53
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	



TEST NUMBER: P854277

CATALOG NUMBER: SQ2-PW1-075U-125D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2438.9	2438.9	2438.9	2438.9	2438.9
2.5°	2422.2	2453.1	2433.4	2435.4	2440.8
5°	2413.4	2452.0	2432.0	2434.8	2455.2
7.5°	2401.3	2440.4	2425.5	2433.8	2453.8
10°	2390.2	2431.0	2418.0	2430.1	2448.2
12.5°	2375.3	2418.0	2408.7	2422.6	2440.8
15°	2343.7	2389.1	2387.8	2404.4	2415.7
17.5°	2307.0	2352.4	2350.2	2354.5	2360.0
20°	2281.0	2326.4	2320.5	2304.2	2304.2
22.5°	2243.8	2292.9	2277.7	2233.3	2218.7
25°	2188.1	2235.8	2190.4	2099.0	2065.0
27.5°	2123.0	2161.7	2070.5	1940.8	1893.5
30°	2076.6	2106.1	1972.1	1829.3	1783.9
32.5°	2028.3	2039.6	1871.7	1723.3	1674.3
35°	1948.8	1928.4	1716.6	1566.9	1523.8
37.5°	1855.0	1794.1	1567.4	1410.7	1363.0
40°	1786.2	1699.9	1463.4	1306.7	1259.0
42.5°	1710.0	1601.9	1364.9	1208.1	1158.6
45°	1584.2	1457.0	1214.8	1062.8	1015.1
47.5°	1442.5	1316.2	1074.5	927.3	886.4
50°	1340.3	1217.6	987.2	839.7	789.8
52.5°	1236.2	1126.3	901.7	750.1	682.0
55°	1094.0	989.6	778.1	610.0	571.4
57.5°	947.7	857.3	666.2	513.5	481.7
60°	854.8	775.3	590.0	461.5	429.7
62.5°	765.6	695.2	515.7	413.3	387.0
65°	631.8	579.6	429.7	345.6	322.9
67.5°	501.7	472.7	357.2	283.5	268.5
70°	418.1	409.0	308.9	248.3	236.9
72.5°	345.6	349.3	262.5	214.9	207.2
75°	246.2	264.4	202.1	169.5	164.9
77.5°	167.7	195.0	149.6	125.3	121.7
80°	123.1	150.4	116.1	97.6	97.6
82.5°	85.9	107.7	82.7	73.4	73.4
85°	41.8	53.2	44.1	30.1	27.9
87.5°	11.1	16.8	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



TEST NUMBER: P854277

CATALOG NUMBER: SQ2-PW1-075U-125D-930-UNV-STD-W-4

**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



TEST NUMBER: P854277

CATALOG NUMBER: SQ2-PW1-075U-125D-930-UNV-STD-W-4

**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	21.16	22.13	21.98	22.97	24.00	17.65	18.62	18.47	19.45	20.48
	3H	22.49	23.36	23.33	24.20	25.26	18.86	19.73	19.70	20.57	21.63
	4H	22.87	23.69	23.72	24.54	25.61	19.31	20.13	20.16	20.98	22.05
	6H	23.08	23.83	23.94	24.69	25.78	19.64	20.39	20.50	21.25	22.33
	8H	23.12	23.83	23.99	24.71	25.79	19.72	20.43	20.59	21.31	22.39
	12H	23.12	23.80	23.99	24.67	25.78	19.73	20.41	20.61	21.28	22.39
4H	2H	21.28	22.09	22.13	22.95	24.02	18.35	19.16	19.20	20.01	21.08
	3H	22.83	23.51	23.70	24.39	25.48	19.74	20.42	20.61	21.30	22.39
	4H	23.35	23.96	24.22	24.84	25.96	20.29	20.91	21.17	21.79	22.90
	6H	23.68	24.21	24.58	25.12	26.24	20.70	21.23	21.60	22.14	23.26
	8H	23.76	24.26	24.66	25.16	26.29	20.81	21.30	21.71	22.20	23.34
	12H	23.79	24.23	24.70	25.15	26.28	20.84	21.28	21.75	22.20	23.34
8H	4H	23.39	23.89	24.29	24.79	25.92	20.63	21.12	21.52	22.02	23.15
	6H	23.83	24.24	24.76	25.18	26.31	21.14	21.54	22.06	22.49	23.62
	8H	23.98	24.34	24.91	25.27	26.42	21.30	21.66	22.23	22.60	23.74
	12H	24.05	24.37	24.98	25.29	26.49	21.37	21.68	22.30	22.61	23.81
12H	4H	23.36	23.80	24.27	24.72	25.86	20.65	21.09	21.56	22.01	23.15
	6H	23.82	24.18	24.76	25.12	26.27	21.20	21.56	22.14	22.50	23.65
	8H	23.99	24.31	24.93	25.24	26.43	21.39	21.71	22.33	22.64	23.84