

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: P854223

Luminaire Tested: SQ2-PR1-125U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854223  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PR1-125U-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

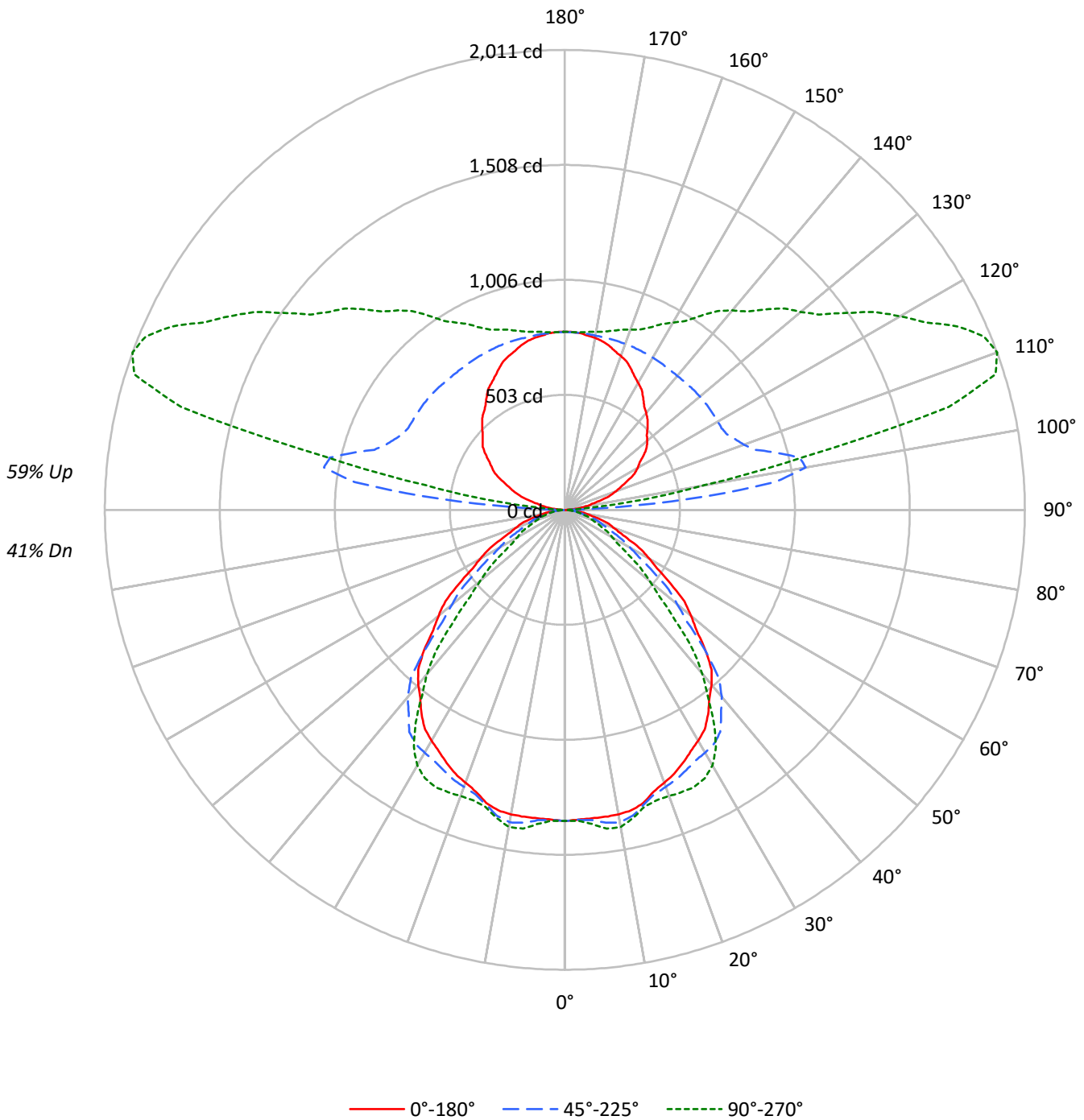
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8077.1 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 70.6  
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: P854223

CATALOG NUMBER: SQ2-PR1-125U-075D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854223

CATALOG NUMBER: SQ2-PR1-125U-075D-930-UNV-STD-W-4

**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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	41
1	96	92	88	85	88	84	81	78	69	67	65	55	54	53	43	42	41	35
2	88	81	75	70	80	74	69	65	61	58	55	49	47	45	38	37	35	30
3	81	72	65	59	73	66	60	55	54	50	46	44	41	38	34	32	31	26
4	74	64	56	50	67	58	52	47	49	44	40	39	36	33	31	29	27	23
5	68	57	49	43	62	52	45	40	44	38	35	35	32	29	28	25	23	20
6	63	51	43	38	57	47	40	35	39	34	30	32	28	26	25	23	21	18
7	58	46	38	33	53	42	36	31	36	31	27	29	25	23	23	21	19	16
8	54	42	34	29	49	39	32	27	33	27	24	27	23	20	21	19	17	14
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15	13
10	47	35	28	23	43	32	26	22	27	23	19	23	19	16	18	16	14	12

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

	0°	45°	90°
0°	21976	21976	21976
5°	21948	22083	22352
10°	22179	22748	23089
15°	22171	22288	22474
20°	21813	22148	22886
25°	21752	22370	23828
30°	21729	22866	24056
35°	21522	23355	22397
40°	21026	22489	19711
45°	19895	19737	15586
50°	18088	16136	12095
55°	15896	13278	9413
60°	13756	10618	7750
65°	11874	8798	6785
70°	10678	7794	6024
75°	9782	6750	5540
80°	8517	5421	5421
85°	6169	4891	2575

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 21507 cd/sqm



TEST NUMBER: P854223

CATALOG NUMBER: SQ2-PR1-125U-075D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.4	1.6
10°-20°	380.5	4.7
20°-30°	588.2	7.3
30°-40°	707.4	8.8
40°-50°	635.2	7.9
50°-60°	425.5	5.3
60°-70°	247.5	3.1
70°-80°	127.1	1.6
80°-90°	32.2	0.4
90°-100°	297.7	3.7
100°-110°	969.3	12.0
110°-120°	958.8	11.9
120°-130°	783.5	9.7
130°-140°	640.4	7.9
140°-150°	498.8	6.2
150°-160°	359.5	4.5
160°-170°	219.7	2.7
170°-180°	74.1	0.9
0°-30°	1100.1	13.6
0°-40°	1807.5	22.4
0°-60°	2868.3	35.5
0°-90°	3275.2	40.5
90°-120°	2225.8	27.6
90°-150°	4148.5	51.4
90°-180°	4802.0	59.5
0°-180°	8077.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1361	1361	1361	1361	1361	
5°	1354	1377	1362	1366	1379	129
15°	1326	1381	1333	1338	1344	372
25°	1221	1270	1256	1302	1338	563
35°	1092	1101	1185	1162	1136	681
45°	871	942	864	729	683	667
55°	565	586	472	364	334	507
65°	311	318	230	187	178	314
75°	157	153	108	92	89	166
85°	33	26	26	18	14	41
90°	0	3	7	6	6	3
95°	40	123	546	194	120	47
105°	165	238	960	1834	1737	176
115°	304	363	782	1612	1896	301
125°	423	472	772	1273	1500	377
135°	511	565	768	1098	1239	395
145°	597	641	766	946	1036	374
155°	682	704	771	847	879	314
165°	744	750	772	802	811	209
175°	775	775	775	781	779	74
180°	778	778	778	778	778	



TEST NUMBER: P854223

CATALOG NUMBER: SQ2-PR1-125U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1361.1	1361.1	1361.1	1361.1	1361.1
2.5°	1355.6	1371.8	1356.7	1357.9	1361.1
5°	1354.2	1377.2	1362.5	1365.6	1379.1
7.5°	1353.9	1386.7	1379.7	1388.2	1406.1
10°	1352.8	1392.1	1387.5	1389.3	1408.3
12.5°	1346.1	1392.0	1370.8	1369.1	1379.4
15°	1326.4	1380.7	1333.4	1337.7	1344.5
17.5°	1291.7	1348.4	1303.4	1318.7	1332.0
20°	1269.5	1325.2	1289.0	1308.9	1332.0
22.5°	1249.6	1305.2	1275.6	1303.6	1335.3
25°	1221.0	1269.8	1255.7	1302.2	1337.5
27.5°	1191.0	1219.8	1236.5	1299.0	1323.6
30°	1165.5	1184.5	1226.5	1280.9	1290.3
32.5°	1137.7	1149.1	1213.2	1241.5	1229.3
35°	1091.9	1101.4	1184.9	1162.1	1136.3
37.5°	1037.6	1057.1	1121.4	1055.7	1026.2
40°	997.6	1030.2	1067.0	969.1	935.2
42.5°	948.8	1000.8	994.8	870.1	828.6
45°	871.3	941.9	864.4	728.8	682.6
47.5°	780.0	852.5	725.6	604.5	561.4
50°	720.1	778.4	642.4	528.9	481.5
52.5°	659.0	701.1	571.4	458.0	414.9
55°	564.7	586.4	471.7	364.2	334.4
57.5°	478.1	492.0	385.4	294.2	272.2
60°	426.0	435.4	328.8	257.7	240.0
62.5°	378.2	385.6	283.3	226.7	213.4
65°	310.8	317.6	230.3	187.1	177.6
67.5°	257.2	260.8	189.5	155.5	146.5
70°	226.2	227.5	165.1	134.4	127.6
72.5°	198.4	196.5	141.8	116.7	112.1
75°	156.8	152.7	108.2	91.5	88.8
77.5°	117.1	112.8	76.0	70.5	70.5
80°	91.6	86.1	58.3	58.3	58.3
82.5°	68.3	60.7	45.0	44.9	43.8
85°	33.3	26.5	26.4	17.9	13.9
87.5°	8.9	9.4	4.7	4.5	4.5
90°	0.0	2.8	6.7	5.7	5.7
92.5°	13.8	49.5	158.3	52.2	40.2
95°	40.2	122.6	545.7	194.5	119.7
97.5°	75.6	159.5	926.1	564.0	344.2
100°	98.6	181.0	1069.3	953.5	618.4
102.5°	124.6	204.0	1051.7	1410.7	1072.6
105°	164.7	237.7	960.2	1833.9	1736.6
107.5°	207.9	276.6	873.3	1870.6	1973.8
110°	239.3	302.0	831.9	1825.0	2011.3



TEST NUMBER: P854223

CATALOG NUMBER: SQ2-PR1-125U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	265.4	327.3	805.9	1742.8	1983.0
115°	304.4	363.4	782.1	1611.9	1896.4
117.5°	344.6	397.8	772.9	1492.0	1775.2
120°	367.6	420.0	770.6	1418.3	1692.5
122.5°	389.8	441.5	771.4	1354.3	1609.8
125°	423.1	471.8	771.6	1272.6	1500.1
127.5°	451.7	501.5	771.4	1211.5	1401.1
130°	470.0	520.6	770.6	1176.5	1346.0
132.5°	486.1	538.9	769.9	1144.1	1303.1
135°	511.2	564.6	767.8	1098.3	1238.8
137.5°	535.7	589.4	765.7	1051.8	1176.5
140°	553.3	604.8	764.9	1020.3	1138.2
142.5°	570.2	619.4	764.9	990.1	1095.3
145°	597.4	641.4	765.8	945.9	1035.8
147.5°	623.8	662.0	767.2	908.3	977.8
150°	641.4	675.1	768.7	885.9	944.9
152.5°	659.0	686.7	769.5	868.8	915.8
155°	681.6	704.1	770.6	847.0	878.8
157.5°	703.0	719.1	771.8	830.9	853.1
160°	716.1	729.2	772.5	820.8	838.6
162.5°	727.6	737.7	772.5	812.3	825.6
165°	743.8	750.4	772.5	801.5	810.8
167.5°	755.3	759.4	772.7	793.3	798.2
170°	763.0	764.8	773.5	787.9	789.8
172.5°	768.3	769.5	775.0	784.8	784.4
175°	775.4	775.4	775.4	781.1	779.2
177.5°	778.3	777.5	776.8	780.5	777.5
180°	778.3	778.3	778.3	778.3	778.3



TEST NUMBER: P854223

CATALOG NUMBER: SQ2-PR1-125U-075D-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	16.56	17.32	17.61	18.36	19.76	13.29	14.04	14.33	15.08	16.48
	3H	17.79	18.46	18.84	19.51	20.93	14.35	15.02	15.40	16.07	17.49
	4H	18.23	18.87	19.30	19.92	21.35	14.74	15.37	15.80	16.43	17.86
	6H	18.55	19.13	19.62	20.19	21.63	15.07	15.65	16.14	16.71	18.15
	8H	18.63	19.18	19.70	20.25	21.69	15.15	15.70	16.23	16.78	18.21
	12H	18.65	19.18	19.73	20.24	21.70	15.15	15.68	16.24	16.75	18.21
4H	2H	16.63	17.26	17.70	18.32	19.75	13.84	14.48	14.91	15.53	16.96
	3H	18.09	18.62	19.17	19.70	21.14	15.10	15.63	16.18	16.71	18.15
	4H	18.68	19.16	19.76	20.23	21.70	15.60	16.08	16.68	17.15	18.62
	6H	19.13	19.54	20.22	20.64	22.09	16.03	16.44	17.12	17.54	19.00
	8H	19.26	19.64	20.35	20.73	22.20	16.15	16.54	17.24	17.62	19.10
	12H	19.31	19.65	20.41	20.76	22.23	16.17	16.52	17.28	17.62	19.10
8H	4H	18.70	19.08	19.79	20.17	21.64	15.90	16.28	16.99	17.37	18.85
	6H	19.24	19.56	20.36	20.69	22.16	16.43	16.75	17.54	17.88	19.35
	8H	19.44	19.72	20.56	20.83	22.32	16.62	16.89	17.74	18.01	19.50
	12H	19.54	19.79	20.66	20.89	22.42	16.67	16.92	17.80	18.03	19.56
12H	4H	18.65	19.00	19.76	20.10	21.58	15.91	16.26	17.02	17.36	18.84
	6H	19.23	19.51	20.35	20.62	22.11	16.49	16.77	17.61	17.88	19.37
	8H	19.44	19.68	20.56	20.79	22.32	16.69	16.94	17.82	18.05	19.57