

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P845055

Luminaire Tested: **SQ4P-PC3-150U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845055  
REPORT IS A COMBINATION OF REPORTS P700141 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PC3-150U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

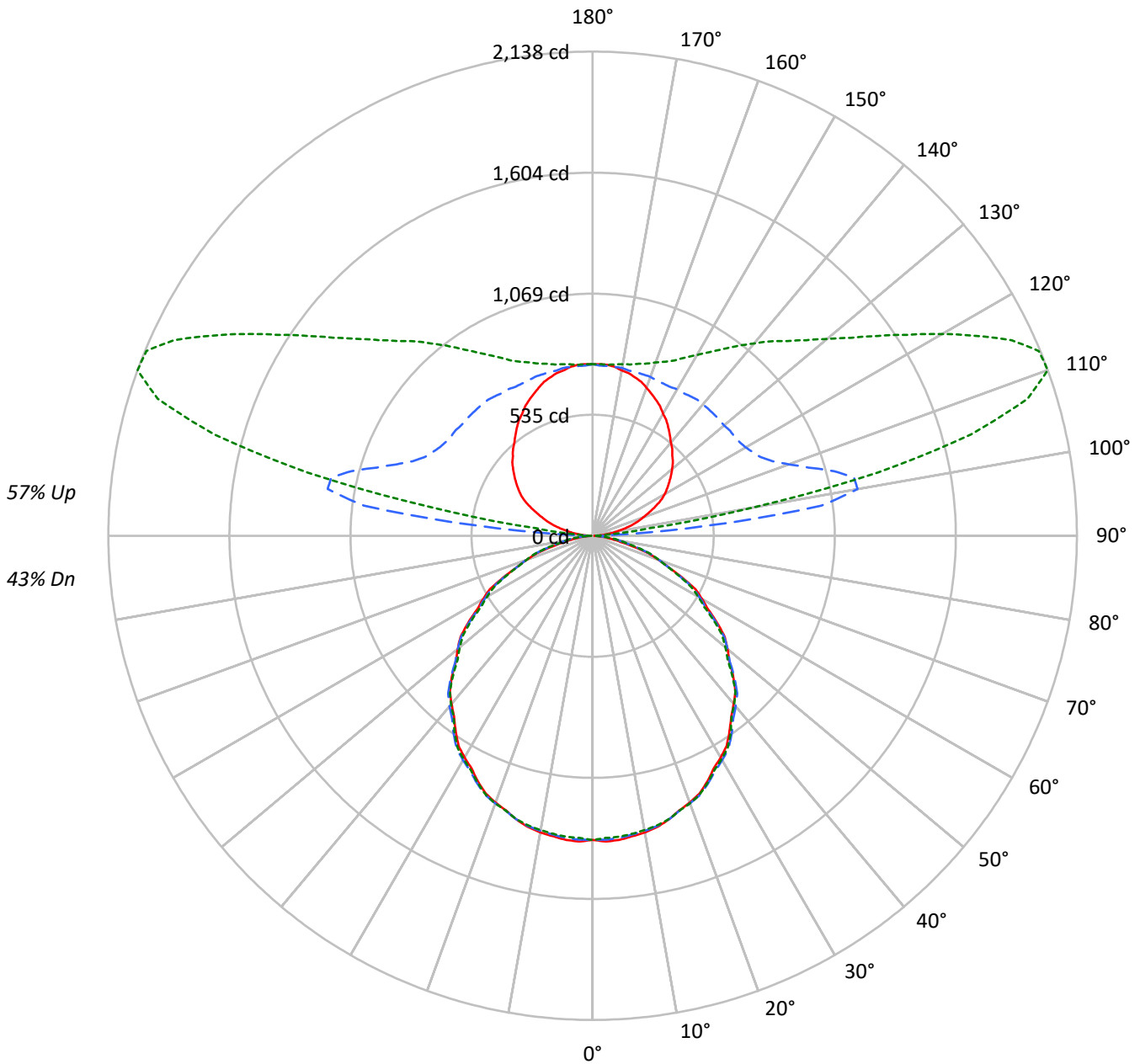
Lumens per Lamp: N/A  
Luminaire Lumens: 8586.4 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 77.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43								
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36								
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	39	37	35	30								
3	80	71	63	58	73	65	58	53	54	49	45	44	40	37	34	32	30	26								
4	73	62	55	49	66	57	50	45	48	43	39	39	35	32	30	28	26	22								
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	27	25	22	19								
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17								
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15								
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13								
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12								
10	46	34	27	22	42	31	25	21	27	21	18	22	18	15	18	15	13	11								

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

	0°	45°	90°
0°	12392	12392	12392
5°	12487	12406	12360
10°	12457	12398	12363
15°	12391	12391	12378
20°	12310	12346	12346
25°	12194	12281	12243
30°	12044	12190	12136
35°	11866	12047	11963
40°	11668	11833	11714
45°	11459	11539	11359
50°	11158	11158	10980
55°	10805	10663	10505
60°	10282	10077	9913
65°	9501	9315	9230
70°	8322	8387	8357
75°	6695	7408	7450
80°	4761	6275	6344
85°	2901	5261	5261



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.1	1.5
10°-20°	364.8	4.2
20°-30°	552.5	6.4
30°-40°	662.3	7.7
40°-50°	675.3	7.9
50°-60°	589.5	6.9
60°-70°	422.0	4.9
70°-80°	217.4	2.5
80°-90°	56.8	0.7
90°-100°	301.6	3.5
100°-110°	1049.5	12.2
110°-120°	1016.6	11.8
120°-130°	797.5	9.3
130°-140°	631.2	7.4
140°-150°	487.1	5.7
150°-160°	349.2	4.1
160°-170°	213.6	2.5
170°-180°	72.2	0.8
0°-30°	1044.4	12.2
0°-40°	1706.7	19.9
0°-60°	2971.6	34.6
0°-90°	3667.8	42.7
90°-120°	2367.8	27.6
90°-150°	4283.6	49.9
90°-180°	4919.0	57.3
0°-180°	8586.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1348	1335	1340	1336	1335	128
15°	1297	1286	1297	1297	1296	366
25°	1198	1189	1206	1203	1203	551
35°	1054	1051	1070	1062	1062	659
45°	878	876	884	873	871	676
55°	672	663	663	653	653	599
65°	435	426	427	423	423	430
75°	188	196	208	209	209	203
85°	27	42	50	51	50	37
90°	11	17	17	11	6	8
95°	51	175	509	130	79	54
105°	175	249	1103	1861	1731	184
115°	305	368	820	1731	2042	302
125°	413	509	764	1290	1538	370
135°	498	560	758	1075	1216	386
145°	583	622	752	928	1007	364
155°	662	684	741	826	854	305
165°	724	730	747	780	786	204
175°	758	758	752	764	758	72
180°	758	758	758	758	758	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1343.1	1343.1	1343.1	1343.1	1343.1
2.5°	1351.3	1339.5	1343.1	1340.1	1335.2
5°	1348.3	1334.8	1339.5	1335.7	1334.6
7.5°	1338.5	1325.1	1331.4	1328.8	1327.5
10°	1329.7	1316.1	1323.4	1320.8	1319.6
12.5°	1317.6	1305.2	1313.4	1310.9	1310.6
15°	1297.3	1286.3	1297.3	1297.3	1295.9
17.5°	1271.5	1261.7	1273.3	1274.1	1273.3
20°	1253.8	1242.8	1257.4	1256.1	1257.4
22.5°	1231.9	1222.9	1238.6	1235.3	1236.6
25°	1197.8	1189.2	1206.4	1202.7	1202.7
27.5°	1157.4	1151.2	1170.1	1166.1	1166.1
30°	1130.5	1124.5	1144.2	1139.2	1139.2
32.5°	1100.7	1096.6	1115.5	1109.5	1109.5
35°	1053.5	1050.9	1069.6	1062.1	1062.1
37.5°	1004.6	1002.5	1019.5	1010.4	1007.4
40°	968.8	967.7	982.5	972.6	972.6
42.5°	933.0	931.8	944.8	932.8	932.8
45°	878.2	875.5	884.4	873.0	870.6
47.5°	818.1	815.8	821.1	808.9	807.6
50°	777.4	774.8	777.4	766.0	765.0
52.5°	735.5	731.1	731.4	720.3	720.1
55°	671.7	663.1	662.9	653.1	653.1
57.5°	603.9	592.8	593.8	585.3	584.0
60°	557.2	545.0	546.1	538.5	537.2
62.5°	511.3	497.4	500.1	491.8	491.6
65°	435.2	425.5	426.7	422.8	422.8
67.5°	362.1	353.1	359.7	356.7	356.5
70°	308.5	302.3	310.9	310.9	309.8
72.5°	258.7	258.5	269.0	269.0	269.9
75°	187.8	196.3	207.8	209.0	209.0
77.5°	125.4	140.4	153.1	153.5	153.3
80°	89.6	106.6	118.1	120.7	119.4
82.5°	60.7	78.7	88.3	90.7	89.6
85°	27.4	42.1	49.7	51.1	49.7
87.5°	7.9	16.8	20.0	20.0	18.0
90°	11.3	17.0	17.0	11.3	5.6
92.5°	28.3	84.8	79.2	33.9	28.3
95°	50.9	175.3	509.0	130.0	79.2
97.5°	79.2	198.0	1018.1	463.8	248.9
100°	107.5	209.2	1187.8	1114.2	718.3
102.5°	141.4	226.3	1182.1	1566.7	1289.5
105°	175.3	248.9	1102.9	1860.8	1730.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	271.4	333.7	859.7	1872.1	2132.2
115°	305.4	367.7	820.1	1730.7	2041.8
117.5°	339.4	407.2	797.4	1600.6	1911.7
120°	367.7	441.1	780.5	1476.2	1781.6
122.5°	390.2	475.1	769.2	1374.4	1651.5
125°	412.9	509.0	763.5	1289.5	1538.4
127.5°	435.5	531.6	763.5	1227.3	1436.6
130°	458.2	543.0	757.9	1165.1	1351.7
132.5°	480.8	548.6	757.9	1119.8	1278.2
135°	497.7	559.9	757.9	1074.6	1216.0
137.5°	520.4	571.3	757.9	1035.1	1165.1
140°	537.3	588.2	757.9	995.4	1108.5
142.5°	559.9	605.2	757.9	955.9	1057.6
145°	582.6	622.1	752.2	927.6	1006.8
147.5°	605.2	639.1	746.6	899.3	961.5
150°	622.1	656.1	746.6	871.0	921.9
152.5°	644.8	673.0	740.9	842.7	888.0
155°	661.8	684.4	740.9	825.7	854.0
157.5°	678.7	701.3	740.9	808.8	831.5
160°	695.7	712.6	746.6	797.4	814.4
162.5°	712.6	724.0	746.6	786.2	797.4
165°	724.0	729.6	746.6	780.5	786.2
167.5°	735.2	740.9	746.6	774.9	774.9
170°	740.9	746.6	752.2	769.2	769.2
172.5°	752.2	752.2	752.2	763.5	763.5
175°	757.9	757.9	752.2	763.5	757.9
177.5°	757.9	757.9	752.2	763.5	757.9
180°	757.9	757.9	757.9	757.9	757.9



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	209.2	277.2	1001.1	1990.8	2013.5
110°	237.5	305.4	921.9	1973.9	2137.9



(END OF REPORT)