

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: P845044

Luminaire Tested: **SQ4P-PC3-125U-100D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845044  
REPORT IS A COMBINATION OF REPORTS P700113 AND P700247  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PC3-125U-100D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

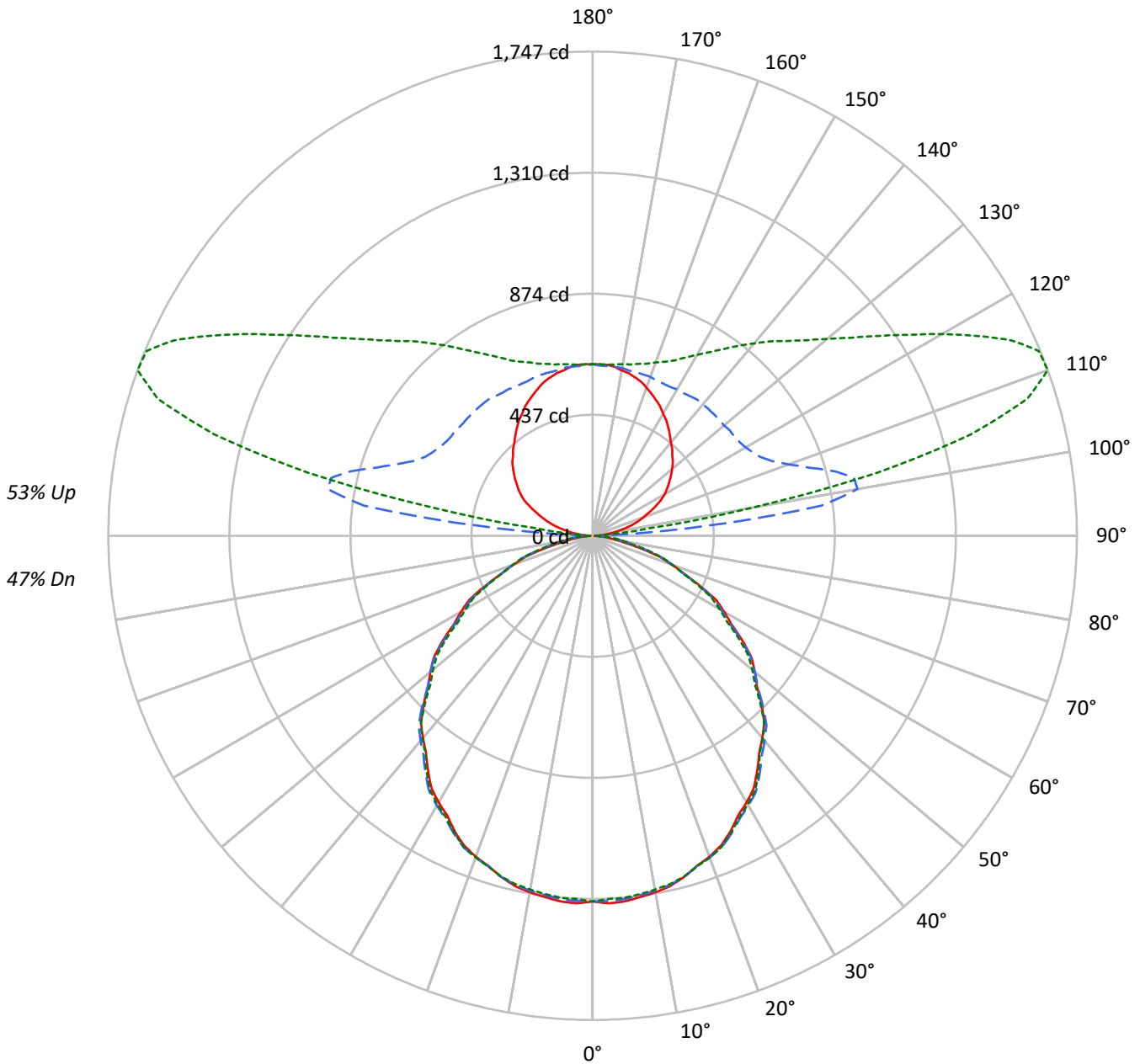
Lumens per Lamp: N/A  
Luminaire Lumens: 7621.4 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 68.9  
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

TEST NUMBER: P845044

CATALOG NUMBER: SQ4P-PC3-125U-100D-B50-1D-UNV

### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47	47	47	47																
1	97	93	89	86	89	86	82	79	72	69	67	59	58	56	47	46	45	40	40	40	40																
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38	33	33	33	33																
3	81	71	64	58	74	66	59	54	55	51	47	46	42	40	37	35	33	28	28	28	28																
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24	24	24	24																
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24	21	21	21	21																
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	21	18	18	18	18																
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	21	19	16	16	16	16																
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	15	15	15	15																
9	50	37	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13	13	13	13																
10	46	34	27	22	43	32	25	21	27	22	19	23	19	16	19	16	14	12	12	12	12																

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

	0°	45°	90°
0°	12174	12174	12174
5°	12268	12188	12143
10°	12238	12181	12145
15°	12174	12174	12160
20°	12093	12129	12129
25°	11979	12065	12029
30°	11832	11976	11923
35°	11656	11834	11752
40°	11462	11626	11508
45°	11256	11336	11160
50°	10962	10962	10787
55°	10613	10476	10320
60°	10101	9900	9739
65°	9335	9152	9069
70°	8176	8238	8211
75°	6577	7276	7322
80°	4681	6169	6232
85°	2848	5166	5166



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.9	1.6
10°-20°	358.4	4.7
20°-30°	542.7	7.1
30°-40°	650.7	8.5
40°-50°	663.5	8.7
50°-60°	579.2	7.6
60°-70°	414.6	5.4
70°-80°	213.6	2.8
80°-90°	55.5	0.7
90°-100°	246.4	3.2
100°-110°	857.4	11.2
110°-120°	830.6	10.9
120°-130°	651.5	8.5
130°-140°	515.7	6.8
140°-150°	398.0	5.2
150°-160°	285.3	3.7
160°-170°	174.5	2.3
170°-180°	59.0	0.8
0°-30°	1026.0	13.5
0°-40°	1676.7	22.0
0°-60°	2919.3	38.3
0°-90°	3603.0	47.3
90°-120°	1934.4	25.4
90°-150°	3499.5	45.9
90°-180°	4018.0	52.7
0°-180°	7621.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1325	1311	1316	1312	1311	126
15°	1274	1264	1274	1274	1273	359
25°	1177	1168	1185	1182	1182	542
35°	1035	1032	1051	1043	1043	647
45°	863	860	869	858	855	664
55°	660	652	651	642	642	588
65°	428	418	419	415	415	423
75°	184	193	204	205	205	199
85°	27	41	49	50	49	37
90°	9	14	14	9	5	7
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	



TEST NUMBER: P845044

CATALOG NUMBER: SQ4P-PC3-125U-100D-B50-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1319.5	1319.5	1319.5	1319.5	1319.5
2.5°	1327.5	1316.0	1319.5	1316.6	1311.7
5°	1324.6	1311.3	1316.0	1312.2	1311.1
7.5°	1314.9	1301.8	1308.0	1305.4	1304.2
10°	1306.3	1292.9	1300.2	1297.6	1296.4
12.5°	1294.5	1282.3	1290.3	1287.9	1287.5
15°	1274.5	1263.7	1274.5	1274.5	1273.1
17.5°	1249.2	1239.5	1250.9	1251.7	1250.9
20°	1231.7	1221.0	1235.3	1234.0	1235.3
22.5°	1210.2	1201.4	1216.8	1213.5	1214.9
25°	1176.7	1168.3	1185.2	1181.6	1181.6
27.5°	1137.1	1131.0	1149.6	1145.6	1145.6
30°	1110.6	1104.7	1124.1	1119.2	1119.2
32.5°	1081.3	1077.3	1095.9	1090.0	1090.0
35°	1034.9	1032.5	1050.7	1043.4	1043.4
37.5°	987.0	984.9	1001.5	992.7	989.7
40°	951.7	950.7	965.3	955.5	955.5
42.5°	916.6	915.4	928.2	916.4	916.4
45°	862.7	860.2	868.8	857.7	855.3
47.5°	803.7	801.4	806.7	794.7	793.4
50°	763.7	761.1	763.7	752.6	751.5
52.5°	722.6	718.2	718.6	707.6	707.4
55°	659.8	651.5	651.3	641.6	641.6
57.5°	593.3	582.4	583.4	575.0	573.7
60°	547.4	535.4	536.5	529.0	527.8
62.5°	502.3	488.7	491.3	483.2	483.0
65°	427.6	418.0	419.2	415.4	415.4
67.5°	355.8	346.9	353.4	350.4	350.2
70°	303.1	296.9	305.4	305.4	304.4
72.5°	254.2	254.0	264.3	264.3	265.1
75°	184.5	192.9	204.1	205.4	205.4
77.5°	123.2	137.9	150.4	150.8	150.6
80°	88.1	104.7	116.1	118.6	117.3
82.5°	59.6	77.3	86.7	89.1	88.1
85°	26.9	41.3	48.8	50.2	48.8
87.5°	7.8	16.5	19.6	19.6	17.7
90°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9



TEST NUMBER: P845044

CATALOG NUMBER: SQ4P-PC3-125U-100D-B50-1D-UNV

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6



(END OF REPORT)