

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: P845119

Luminaire Tested: **SQ4P-PP3-100U-125D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845119  
REPORT IS A COMBINATION OF REPORTS P700090 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PP3-100U-125D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

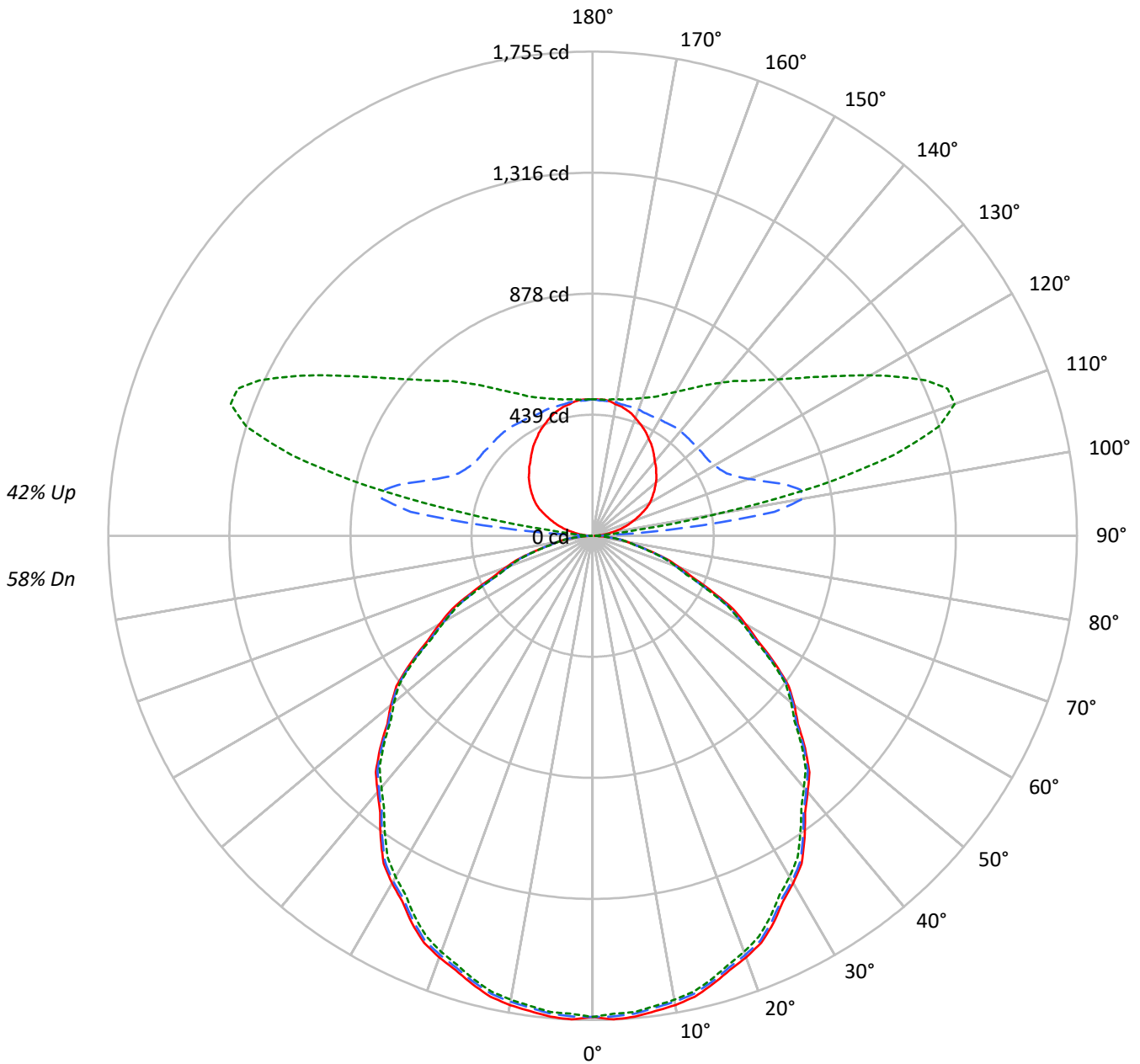
Lumens per Lamp: N/A  
Luminaire Lumens: 7675.5 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 71.8  
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									
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64	58																			
1	100	96	92	88	93	89	86	83	77	75	73	67	65	63	57	55	54	50																			
2	91	84	78	72	85	78	73	68	68	64	61	59	56	53	50	48	46	42																			
3	83	74	66	61	77	69	63	57	60	55	51	52	48	45	45	42	39	36																			
4	76	65	57	51	71	61	54	49	54	48	44	47	42	39	40	37	34	31																			
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27																			
6	65	52	44	38	60	49	42	37	43	37	33	38	33	30	33	29	26	23																			
7	60	47	39	34	56	45	37	32	39	33	29	34	30	26	30	26	23	21																			
8	55	43	35	30	52	41	33	29	36	30	26	32	27	23	27	24	21	19																			
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	22	19	17																			
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15																			

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

	0°	45°	90°
0°	16089	16089	16089
5°	16207	16107	16051
10°	16179	16066	15995
15°	16073	15985	15896
20°	15966	15874	15755
25°	15775	15668	15512
30°	15485	15403	15207
35°	15079	14975	14785
40°	14595	14503	14338
45°	14200	14099	13959
50°	13687	13601	13468
55°	12978	12809	12712
60°	11815	11479	11422
65°	10413	9975	9942
70°	8983	8616	8616
75°	7743	7625	7514
80°	6817	6907	6732
85°	5335	5822	5822



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.9	2.1
10°-20°	470.8	6.1
20°-30°	705.2	9.2
30°-40°	827.2	10.8
40°-50°	829.7	10.8
50°-60°	707.9	9.2
60°-70°	461.6	6.0
70°-80°	231.6	3.0
80°-90°	65.3	0.9
90°-100°	196.9	2.6
100°-110°	685.2	8.9
110°-120°	663.7	8.6
120°-130°	520.7	6.8
130°-140°	412.1	5.4
140°-150°	318.0	4.1
150°-160°	228.0	3.0
160°-170°	139.4	1.8
170°-180°	47.2	0.6
0°-30°	1340.9	17.5
0°-40°	2168.1	28.2
0°-60°	3705.7	48.3
0°-90°	4464.3	58.2
90°-120°	1545.9	20.1
90°-150°	2796.7	36.4
90°-180°	3211.0	41.8
0°-180°	7675.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1744	1744	1744	1744	1744	
5°	1750	1734	1739	1733	1733	166
15°	1683	1666	1674	1667	1664	475
25°	1550	1532	1539	1525	1524	713
35°	1339	1325	1330	1314	1313	836
45°	1088	1081	1081	1070	1070	838
55°	807	804	796	792	790	717
65°	477	468	457	454	455	476
75°	217	217	214	212	211	235
85°	50	55	55	55	55	59
90°	7	11	11	7	4	6
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1743.8	1743.8	1743.8	1743.8	1743.8
2.5°	1754.7	1740.4	1743.8	1741.3	1734.1
5°	1749.9	1733.5	1739.1	1733.1	1733.1
7.5°	1738.0	1720.1	1725.6	1719.6	1719.4
10°	1727.0	1709.1	1714.9	1708.5	1707.3
12.5°	1711.2	1693.3	1700.1	1692.7	1692.5
15°	1682.7	1666.1	1673.5	1667.2	1664.2
17.5°	1650.5	1632.6	1641.4	1632.9	1631.6
20°	1626.1	1608.2	1616.8	1604.7	1604.7
22.5°	1596.8	1578.9	1588.9	1572.8	1572.8
25°	1549.6	1531.7	1539.1	1525.1	1523.8
27.5°	1493.8	1476.1	1483.7	1467.9	1467.7
30°	1453.5	1436.9	1445.8	1429.0	1427.4
32.5°	1409.5	1394.1	1400.5	1383.7	1382.1
35°	1338.8	1325.4	1329.6	1314.4	1312.7
37.5°	1264.6	1250.9	1255.6	1242.4	1241.9
40°	1211.8	1202.9	1204.2	1193.4	1190.5
42.5°	1163.1	1152.8	1154.1	1143.3	1142.8
45°	1088.3	1080.6	1080.6	1069.8	1069.8
47.5°	1008.7	1002.9	1001.3	992.4	992.1
50°	953.6	949.2	947.6	939.9	938.3
52.5°	896.1	894.0	888.8	882.4	882.2
55°	806.8	804.0	796.3	791.5	790.3
57.5°	710.1	704.1	695.4	688.8	689.8
60°	640.3	634.2	622.1	619.0	619.0
62.5°	573.1	566.0	553.6	549.4	551.8
65°	477.0	468.0	456.9	454.0	455.4
67.5°	389.5	381.3	369.4	369.4	368.3
70°	333.0	328.5	319.4	319.4	319.4
72.5°	283.0	280.8	274.3	274.1	272.9
75°	217.2	217.2	213.9	212.4	210.8
77.5°	162.6	163.1	161.7	160.2	157.3
80°	128.3	131.5	130.0	128.3	126.7
82.5°	96.7	99.6	99.3	96.7	96.2
85°	50.4	54.8	55.0	55.0	55.0
87.5°	13.4	18.2	19.5	19.5	20.8
90°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)