

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: P845211

Luminaire Tested: **SQ4P-PR1-125U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845211  
REPORT IS A COMBINATION OF REPORTS P700121 AND P700247  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-125U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

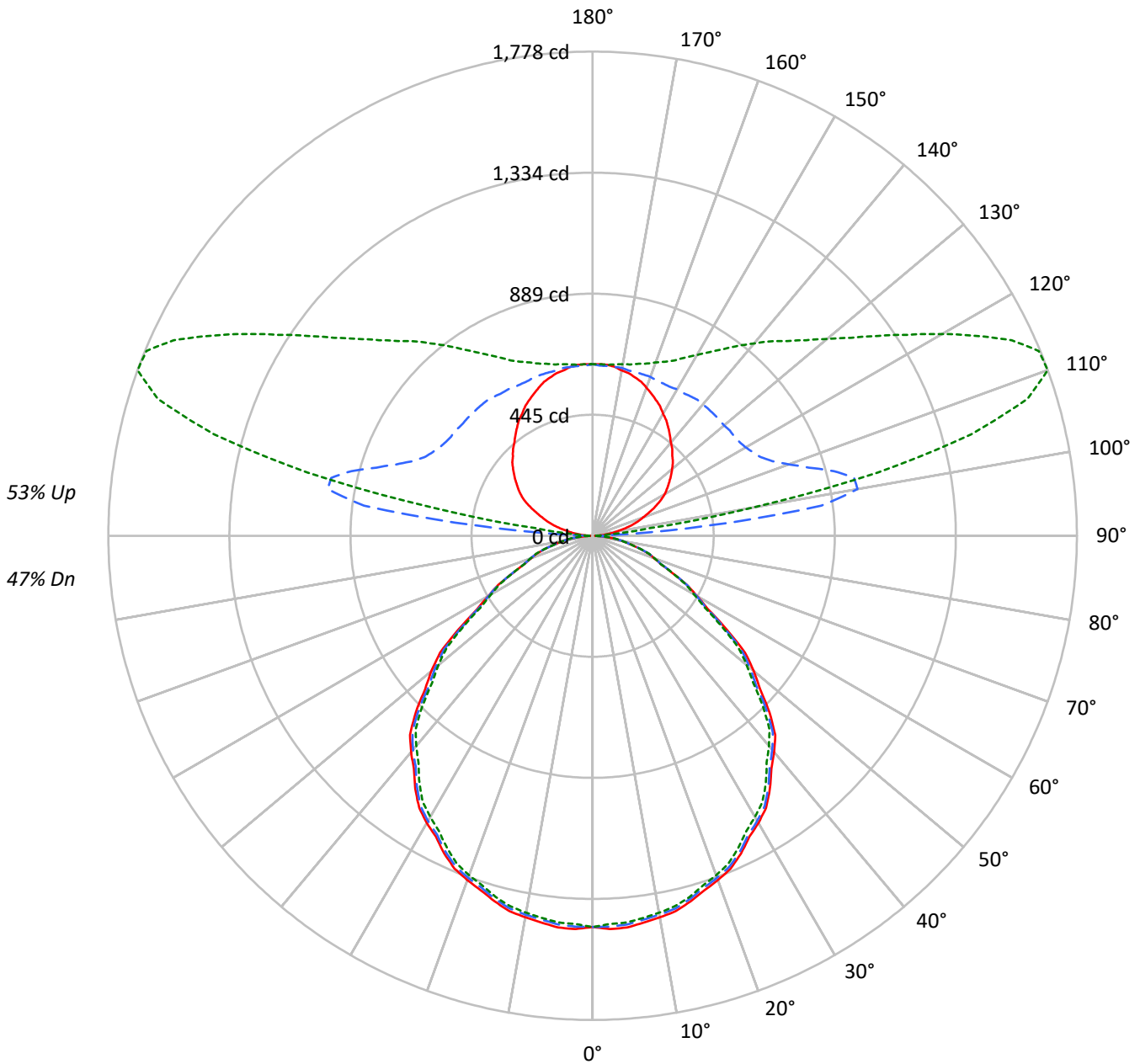
Lumens per Lamp: N/A  
Luminaire Lumens: 7683.1 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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

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### Luminous Intensity Polar Plot





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

RF	20				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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47	47	47	47
1	97	93	89	86	89	86	82	80	72	70	67	59	58	56	47	46	45	40	40	40	40
2	89	82	76	71	81	75	70	66	63	60	56	52	50	47	42	40	39	34	34	34	34
3	81	72	65	59	74	66	60	55	56	51	48	46	43	40	37	35	33	29	29	29	29
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29	25	25	25	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	30	27	25	22	22	22	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19	19	19	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	23	25	22	20	17	17	17	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	15	15	15	15
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16	14	14	14	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13	13	13	13

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

	0°	45°	90°
0°	13253	13253	13253
5°	13374	13272	13202
10°	13330	13239	13168
15°	13273	13190	13119
20°	13207	13120	13024
25°	13113	13026	12874
30°	12971	12880	12696
35°	12781	12668	12487
40°	12487	12355	12129
45°	11982	11769	11528
50°	11082	10815	10601
55°	9672	9455	9256
60°	8150	8084	7923
65°	7049	7078	7021
70°	6471	6507	6507
75°	6217	6217	6267
80°	5850	5914	5850
85°	4721	5240	5240



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.9	1.8
10°-20°	388.7	5.1
20°-30°	586.3	7.6
30°-40°	698.5	9.1
40°-50°	688.7	9.0
50°-60°	526.3	6.9
60°-70°	325.7	4.2
70°-80°	185.0	2.4
80°-90°	57.8	0.8
90°-100°	250.8	3.3
100°-110°	872.7	11.4
110°-120°	845.4	11.0
120°-130°	663.2	8.6
130°-140°	524.9	6.8
140°-150°	405.1	5.3
150°-160°	290.4	3.8
160°-170°	177.6	2.3
170°-180°	60.1	0.8
0°-30°	1110.8	14.5
0°-40°	1809.4	23.5
0°-60°	3024.4	39.4
0°-90°	3592.8	46.8
90°-120°	1969.0	25.6
90°-150°	3562.1	46.4
90°-180°	4090.0	53.2
0°-180°	7683.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1436	1436	1436	1436	1436	
5°	1444	1428	1433	1428	1426	137
15°	1390	1375	1381	1376	1374	392
25°	1288	1272	1280	1266	1265	593
35°	1135	1121	1125	1110	1109	708
45°	918	906	902	886	884	703
55°	601	592	588	578	575	539
65°	323	321	324	322	322	327
75°	174	174	174	176	176	184
85°	45	47	50	50	50	52
90°	9	14	14	9	5	8
95°	42	146	423	108	66	45
105°	146	207	917	1547	1439	153
115°	254	306	682	1439	1698	251
125°	343	423	635	1072	1279	307
135°	414	466	630	894	1011	321
145°	484	517	626	771	837	303
155°	550	569	616	687	710	254
165°	602	607	621	649	654	170
175°	630	630	626	635	630	60
180°	630	630	630	630	630	



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CATALOG NUMBER: SQ4P-PR1-125U-100D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1436.5	1436.5	1436.5	1436.5	1436.5
2.5°	1445.6	1433.0	1436.5	1433.5	1426.8
5°	1444.0	1428.2	1433.0	1427.8	1425.5
7.5°	1433.0	1417.4	1422.1	1417.0	1415.7
10°	1422.9	1408.4	1413.1	1408.1	1405.6
12.5°	1412.0	1396.7	1402.2	1396.2	1393.9
15°	1389.6	1375.1	1380.9	1376.0	1373.5
17.5°	1364.9	1349.3	1355.3	1349.5	1346.3
20°	1345.1	1330.5	1336.3	1327.8	1326.5
22.5°	1323.3	1308.8	1314.5	1303.0	1302.8
25°	1288.1	1272.3	1279.6	1265.9	1264.6
27.5°	1246.3	1231.8	1237.6	1223.7	1222.4
30°	1217.5	1203.0	1209.0	1194.1	1191.7
32.5°	1184.9	1171.4	1176.3	1161.4	1159.9
35°	1134.8	1121.3	1124.7	1110.0	1108.7
37.5°	1077.6	1065.4	1067.3	1050.9	1049.9
40°	1036.8	1024.9	1025.8	1008.5	1007.1
42.5°	992.5	980.3	979.2	962.0	960.7
45°	918.3	906.1	902.0	885.8	883.5
47.5°	833.6	821.4	813.9	800.7	799.0
50°	772.1	759.9	753.5	742.3	738.6
52.5°	705.8	693.7	688.3	678.1	674.5
55°	601.3	591.7	587.8	577.9	575.4
57.5°	502.1	495.7	494.4	484.8	483.8
60°	441.7	438.1	438.1	429.4	429.4
62.5°	390.3	387.5	389.5	383.7	382.9
65°	322.9	320.6	324.2	321.6	321.6
67.5°	269.8	269.8	271.9	270.9	270.9
70°	239.9	239.9	241.2	241.2	241.2
72.5°	213.3	212.4	215.6	215.4	214.6
75°	174.4	174.4	174.4	175.8	175.8
77.5°	135.9	136.1	137.1	136.9	135.9
80°	110.1	111.3	111.3	110.1	110.1
82.5°	84.5	85.6	85.6	85.3	84.5
85°	44.6	46.9	49.5	49.5	49.5
87.5°	12.8	16.7	19.9	19.9	18.8
90°	9.4	14.1	14.1	9.4	4.7
92.5°	23.5	70.5	65.8	28.2	23.5
95°	42.3	145.8	423.3	108.1	65.8
97.5°	65.8	164.6	846.6	385.7	207.0
100°	89.3	174.0	987.7	926.5	597.3
102.5°	117.5	188.1	983.0	1302.8	1072.4
105°	145.8	207.0	917.1	1547.4	1439.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.8	277.5	714.9	1556.8	1773.2
115°	254.0	305.7	682.0	1439.3	1697.9
117.5°	282.2	338.7	663.1	1331.1	1589.7
120°	305.7	366.9	649.1	1227.6	1481.6
122.5°	324.5	395.1	639.7	1142.9	1373.4
125°	343.3	423.3	634.9	1072.4	1279.4
127.5°	362.1	442.1	634.9	1020.6	1194.7
130°	380.9	451.5	630.3	968.9	1124.1
132.5°	399.8	456.2	630.3	931.3	1063.0
135°	413.9	465.6	630.3	893.7	1011.2
137.5°	432.7	475.0	630.3	860.7	968.9
140°	446.8	489.2	630.3	827.8	921.9
142.5°	465.6	503.2	630.3	794.8	879.5
145°	484.4	517.4	625.5	771.4	837.2
147.5°	503.2	531.4	620.9	747.8	799.6
150°	517.4	545.6	620.9	724.3	766.6
152.5°	536.2	559.7	616.1	700.8	738.4
155°	550.3	569.1	616.1	686.7	710.2
157.5°	564.4	583.2	616.1	672.6	691.4
160°	578.5	592.6	620.9	663.1	677.3
162.5°	592.6	602.1	620.9	653.7	663.1
165°	602.1	606.7	620.9	649.1	653.7
167.5°	611.5	616.1	620.9	644.3	644.3
170°	616.1	620.9	625.5	639.7	639.7
172.5°	625.5	625.5	625.5	634.9	634.9
175°	630.3	630.3	625.5	634.9	630.3
177.5°	630.3	630.3	625.5	634.9	630.3
180°	630.3	630.3	630.3	630.3	630.3



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	174.0	230.4	832.5	1655.5	1674.4
110°	197.5	254.0	766.6	1641.5	1777.8



(END OF REPORT)