

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: P845034

Luminaire Tested: **SQ4P-PC3-100U-125D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845034
REPORT IS A COMBINATION OF REPORTS P700086 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PC3-100U-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

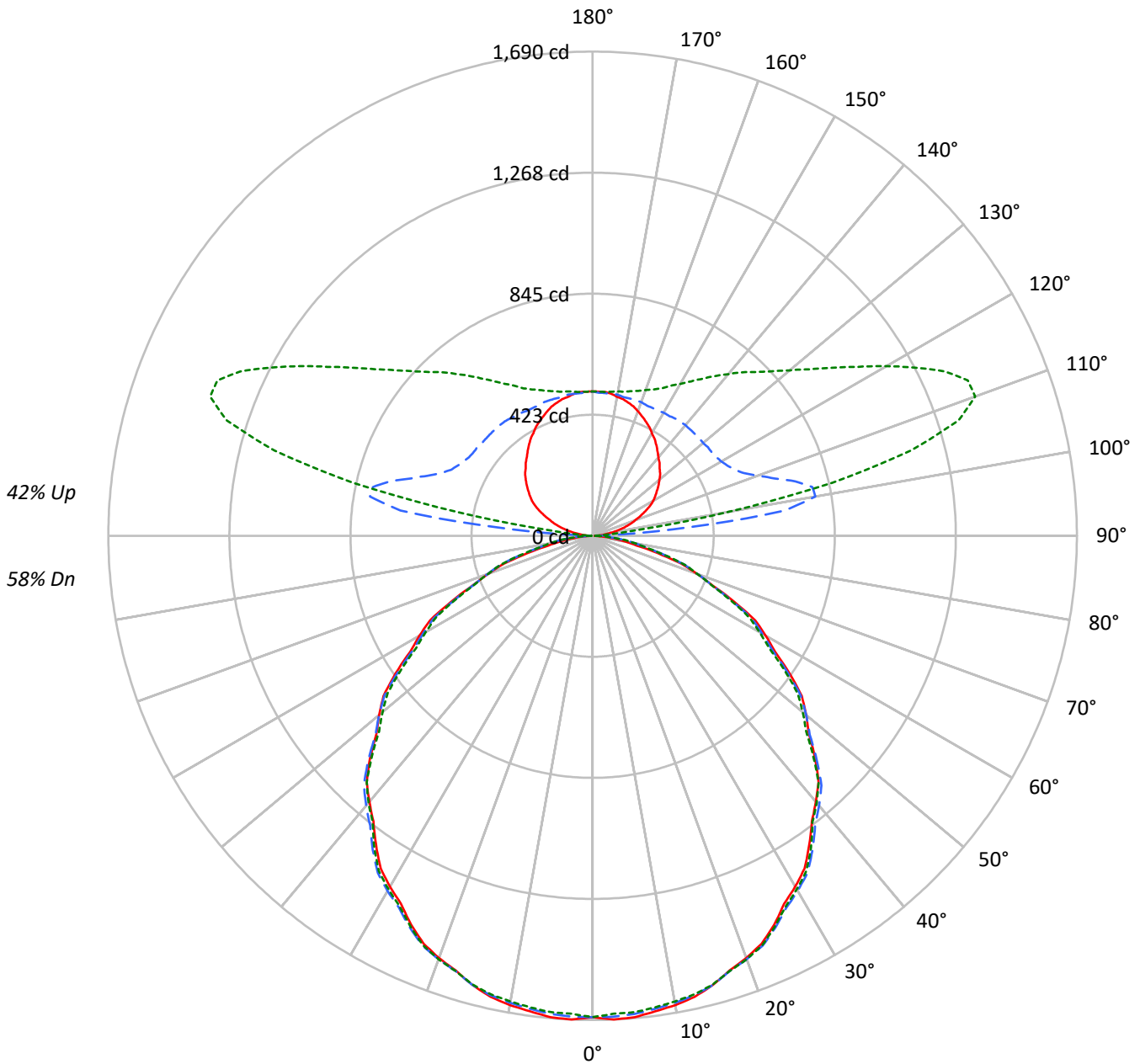
Lumens per Lamp: N/A
Luminaire Lumens: 7855.6 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.8
Input Voltage (V): NR
Input Current (A_{in}): 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	95	91	88	93	89	86	83	77	75	73	67	65	63	57	55	54	49																			
2	91	83	77	72	84	78	72	68	68	64	60	58	55	53	50	48	46	41																			
3	83	73	66	60	77	69	62	57	60	55	50	52	48	45	44	41	39	35																			
4	76	65	57	51	70	61	54	48	53	47	43	46	42	38	39	36	33	30																			
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29	26																			
6	64	52	44	38	60	49	41	36	43	37	32	37	33	29	32	28	25	23																			
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	29	26	23	20																			
8	55	42	35	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18																			
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18	16																			
10	48	36	28	23	45	34	27	22	30	24	20	26	22	18	23	19	17	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15501	15501	15501
5°	15620	15518	15460
10°	15582	15510	15464
15°	15499	15499	15483
20°	15397	15442	15442
25°	15253	15362	15316
30°	15065	15247	15181
35°	14843	15069	14963
40°	14595	14803	14654
45°	14332	14433	14209
50°	13957	13957	13735
55°	13515	13338	13139
60°	12861	12603	12400
65°	11885	11651	11544
70°	10410	10491	10453
75°	8374	9265	9322
80°	5956	7853	7933
85°	3631	6584	6584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	2.0
10°-20°	456.3	5.8
20°-30°	691.0	8.8
30°-40°	828.5	10.5
40°-50°	844.7	10.8
50°-60°	737.4	9.4
60°-70°	527.9	6.7
70°-80°	272.0	3.5
80°-90°	70.0	0.9
90°-100°	200.5	2.6
100°-110°	697.4	8.9
110°-120°	675.6	8.6
120°-130°	530.0	6.7
130°-140°	419.5	5.3
140°-150°	323.7	4.1
150°-160°	232.1	3.0
160°-170°	141.9	1.8
170°-180°	48.0	0.6
0°-30°	1306.4	16.6
0°-40°	2134.8	27.2
0°-60°	3717.0	47.3
0°-90°	4586.9	58.4
90°-120°	1573.5	20.0
90°-150°	2846.7	36.2
90°-180°	3269.0	41.6
0°-180°	7855.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1680	1680	1680	1680	1680	
5°	1687	1670	1676	1671	1669	160
15°	1623	1609	1623	1623	1621	458
25°	1498	1488	1509	1504	1504	690
35°	1318	1314	1338	1328	1328	824
45°	1098	1095	1106	1092	1089	845
55°	840	829	829	817	817	749
65°	544	532	534	529	529	538
75°	235	246	260	262	262	254
85°	34	52	62	64	62	47
90°	8	11	11	8	4	6
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



TEST NUMBER: P845034

CATALOG NUMBER: SQ4P-PC3-100U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1680.1	1680.1	1680.1	1680.1	1680.1
2.5°	1690.2	1675.5	1680.1	1676.3	1670.2
5°	1686.6	1669.6	1675.5	1670.7	1669.3
7.5°	1674.2	1657.6	1665.3	1662.1	1660.5
10°	1663.2	1646.2	1655.5	1652.2	1650.6
12.5°	1648.2	1632.6	1642.9	1639.8	1639.4
15°	1622.7	1609.0	1622.7	1622.7	1621.0
17.5°	1590.5	1578.2	1592.7	1593.7	1592.7
20°	1568.2	1554.6	1572.8	1571.2	1572.8
22.5°	1540.9	1529.7	1549.2	1545.2	1546.8
25°	1498.3	1487.5	1509.0	1504.5	1504.5
27.5°	1447.9	1440.0	1463.7	1458.5	1458.5
30°	1414.1	1406.6	1431.2	1425.0	1425.0
32.5°	1376.7	1371.7	1395.3	1387.8	1387.8
35°	1317.8	1314.5	1337.9	1328.5	1328.5
37.5°	1256.7	1254.0	1275.2	1263.9	1260.2
40°	1211.8	1210.6	1229.1	1216.7	1216.7
42.5°	1167.0	1165.5	1181.9	1166.8	1166.8
45°	1098.4	1095.2	1106.2	1091.9	1089.0
47.5°	1023.3	1020.4	1027.1	1011.8	1010.2
50°	972.4	969.2	972.4	958.2	956.9
52.5°	920.1	914.5	915.0	901.0	900.7
55°	840.2	829.4	829.2	816.8	816.8
57.5°	755.4	741.5	742.8	732.1	730.5
60°	697.0	681.6	683.0	673.6	672.0
62.5°	639.6	622.1	625.6	615.2	614.9
65°	544.4	532.3	533.7	528.8	528.8
67.5°	452.9	441.7	450.0	446.3	446.0
70°	385.9	378.1	388.9	388.9	387.5
72.5°	323.7	323.4	336.6	336.6	337.6
75°	234.9	245.7	259.9	261.5	261.5
77.5°	156.9	175.7	191.5	192.0	191.8
80°	112.1	133.2	147.8	151.0	149.3
82.5°	75.9	98.5	110.5	113.5	112.1
85°	34.3	52.5	62.2	63.9	62.2
87.5°	9.9	20.9	24.9	24.9	22.5
90°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CATALOG NUMBER: SQ4P-PC3-100U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)