

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: P845035

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845035
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-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

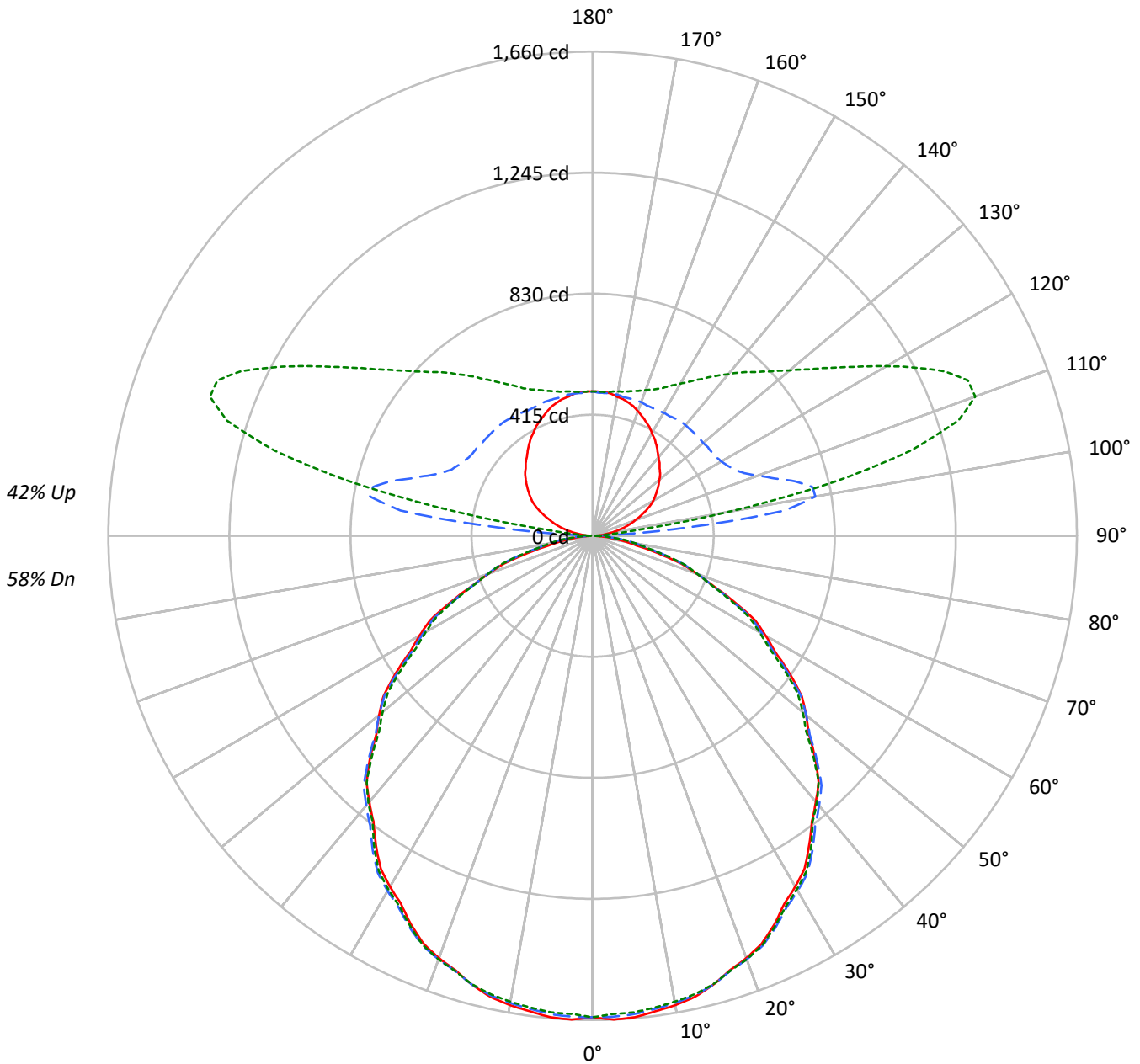
Lumens per Lamp: N/A
Luminaire Lumens: 7717.4 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	15228	15228	15228
5°	15345	15245	15189
10°	15308	15236	15192
15°	15227	15227	15211
20°	15127	15170	15170
25°	14984	15092	15046
30°	14800	14979	14915
35°	14582	14804	14699
40°	14338	14543	14396
45°	14080	14179	13960
50°	13712	13712	13492
55°	13277	13103	12909
60°	12634	12382	12182
65°	11675	11446	11341
70°	10226	10305	10270
75°	8227	9101	9158
80°	5850	7715	7794
85°	3567	6468	6468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.2	2.0
10°-20°	448.3	5.8
20°-30°	678.9	8.8
30°-40°	813.9	10.5
40°-50°	829.9	10.8
50°-60°	724.4	9.4
60°-70°	518.6	6.7
70°-80°	267.2	3.5
80°-90°	68.8	0.9
90°-100°	196.9	2.6
100°-110°	685.2	8.9
110°-120°	663.7	8.6
120°-130°	520.7	6.7
130°-140°	412.1	5.3
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°	1283.4	16.6
0°-40°	2097.3	27.2
0°-60°	3651.6	47.3
0°-90°	4506.2	58.4
90°-120°	1545.9	20.0
90°-150°	2796.7	36.2
90°-180°	3211.0	41.6
0°-180°	7717.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1650	1650	1650	1650	1650	
5°	1657	1640	1646	1641	1640	157
15°	1594	1581	1594	1594	1592	449
25°	1472	1461	1482	1478	1478	677
35°	1295	1291	1314	1305	1305	810
45°	1079	1076	1087	1073	1070	831
55°	825	815	815	802	802	736
65°	535	523	524	520	520	529
75°	231	241	255	257	257	249
85°	34	52	61	63	61	46
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	



TEST NUMBER: P845035

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1650.5	1650.5	1650.5	1650.5	1650.5
2.5°	1660.5	1646.1	1650.5	1646.8	1640.8
5°	1656.9	1640.2	1646.1	1641.3	1640.0
7.5°	1644.7	1628.4	1636.1	1632.9	1631.3
10°	1634.0	1617.3	1626.3	1623.1	1621.6
12.5°	1619.2	1603.9	1614.0	1611.0	1610.5
15°	1594.2	1580.7	1594.2	1594.2	1592.5
17.5°	1562.6	1550.5	1564.7	1565.7	1564.7
20°	1540.7	1527.2	1545.1	1543.6	1545.1
22.5°	1513.8	1502.8	1522.0	1518.0	1519.6
25°	1471.9	1461.4	1482.5	1478.0	1478.0
27.5°	1422.4	1414.7	1437.9	1432.9	1432.9
30°	1389.2	1381.9	1406.0	1400.0	1400.0
32.5°	1352.5	1347.6	1370.7	1363.4	1363.4
35°	1294.7	1291.4	1314.4	1305.1	1305.1
37.5°	1234.6	1231.9	1252.8	1241.6	1238.0
40°	1190.5	1189.3	1207.5	1195.3	1195.3
42.5°	1146.5	1145.0	1161.1	1146.3	1146.3
45°	1079.1	1076.0	1086.7	1072.7	1069.9
47.5°	1005.3	1002.5	1009.1	994.0	992.4
50°	955.3	952.1	955.3	941.4	940.0
52.5°	903.9	898.4	898.9	885.2	884.9
55°	825.4	814.8	814.6	802.5	802.5
57.5°	742.1	728.5	729.7	719.3	717.6
60°	684.7	669.7	671.0	661.8	660.2
62.5°	628.3	611.2	614.6	604.3	604.1
65°	534.8	522.9	524.3	519.5	519.5
67.5°	445.0	433.9	442.1	438.4	438.1
70°	379.1	371.5	382.0	382.0	380.7
72.5°	318.0	317.7	330.6	330.6	331.7
75°	230.8	241.3	255.3	256.9	256.9
77.5°	154.1	172.6	188.1	188.6	188.4
80°	110.1	130.9	145.2	148.3	146.7
82.5°	74.5	96.7	108.5	111.5	110.1
85°	33.7	51.6	61.1	62.7	61.1
87.5°	9.7	20.6	24.5	24.5	22.1
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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CATALOG NUMBER: SQ4P-PC3-100U-125D-B50-1D-UNV

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)