

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: P844923

Luminaire Tested: **SQ4P-F-075U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844923
REPORT IS A COMBINATION OF REPORTS P700221 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-075U-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

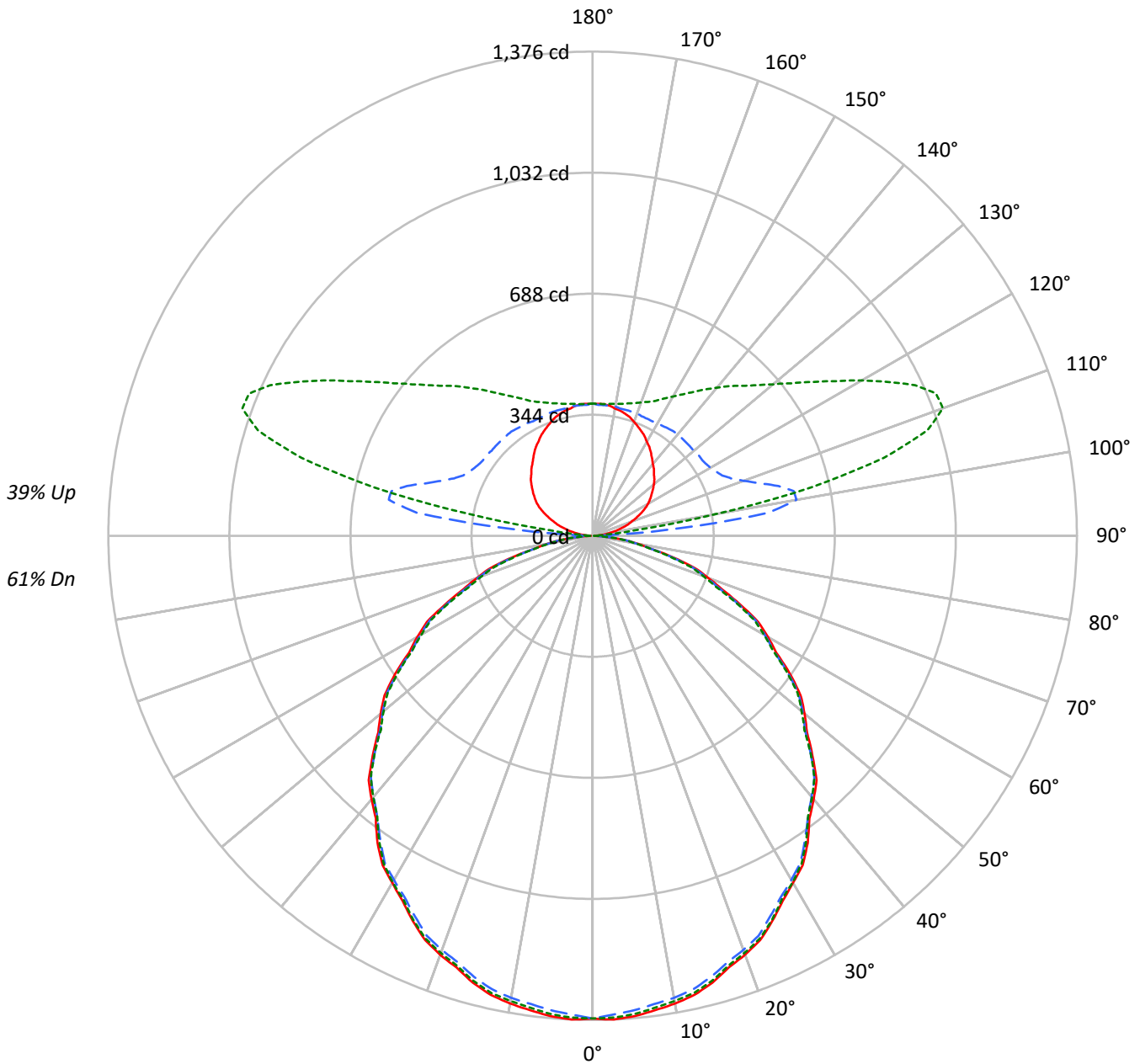
Lumens per Lamp: N/A
Luminaire Lumens: 6181.9 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53.9
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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61																			
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	56	51																			
2	91	84	77	72	85	78	73	68	68	64	61	59	56	53	51	49	47	43																			
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	40	36																			
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34	31																			
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	33	30	27																			
6	64	52	44	38	60	49	41	36	43	37	33	38	33	29	33	29	26	23																			
7	59	47	39	33	55	44	37	31	39	33	29	34	29	26	30	26	23	21																			
8	55	43	35	29	51	40	33	28	36	30	25	31	27	23	27	24	21	18																			
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19	17																			
10	48	36	28	23	45	34	27	22	30	24	21	27	22	19	24	20	17	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12657	12657	12657
5°	12690	12537	12638
10°	12646	12491	12577
15°	12559	12402	12508
20°	12440	12297	12388
25°	12300	12153	12266
30°	12130	12032	12111
35°	12000	11854	11914
40°	11771	11656	11679
45°	11526	11431	11431
50°	11283	11177	11127
55°	11020	10872	10813
60°	10608	10439	10372
65°	10103	9903	9780
70°	9414	9212	9015
75°	8441	8185	7985
80°	6833	6742	6540
85°	4065	4679	4848



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	2.1
10°-20°	368.6	6.0
20°-30°	553.7	9.0
30°-40°	660.9	10.7
40°-50°	677.3	11.0
50°-60°	604.0	9.8
60°-70°	449.8	7.3
70°-80°	244.2	3.9
80°-90°	57.4	0.9
90°-100°	149.4	2.4
100°-110°	519.9	8.4
110°-120°	503.6	8.1
120°-130°	395.1	6.4
130°-140°	312.7	5.1
140°-150°	241.3	3.9
150°-160°	173.0	2.8
160°-170°	105.8	1.7
170°-180°	35.8	0.6
0°-30°	1051.7	17.0
0°-40°	1712.6	27.7
0°-60°	2993.9	48.4
0°-90°	3745.3	60.6
90°-120°	1172.9	19.0
90°-150°	2122.0	34.3
90°-180°	2437.0	39.4
0°-180°	6181.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1370	1368	1354	1366	1365	130
15°	1315	1311	1298	1310	1310	370
25°	1208	1205	1194	1201	1205	556
35°	1065	1062	1052	1052	1058	665
45°	883	885	876	874	876	682
55°	685	685	676	670	672	610
65°	463	461	454	448	448	458
75°	237	235	230	226	224	250
85°	38	42	44	46	46	54
90°	6	8	8	6	3	4
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1371.9	1371.9	1371.9	1371.9	1371.9
2.5°	1376.2	1373.5	1361.6	1371.9	1370.6
5°	1370.2	1368.3	1353.7	1366.4	1364.6
7.5°	1360.1	1356.7	1342.2	1354.8	1352.8
10°	1349.8	1346.2	1333.3	1344.3	1342.5
12.5°	1336.7	1334.6	1320.3	1331.2	1330.7
15°	1314.9	1311.2	1298.4	1309.5	1309.5
17.5°	1286.4	1284.2	1271.6	1282.1	1281.0
20°	1267.0	1263.7	1252.5	1261.7	1261.7
22.5°	1243.7	1241.6	1230.6	1238.2	1239.6
25°	1208.3	1204.9	1193.8	1201.3	1204.9
27.5°	1169.6	1166.8	1157.5	1162.3	1164.8
30°	1138.6	1138.6	1129.4	1131.4	1136.8
32.5°	1110.8	1110.8	1100.1	1102.0	1104.6
35°	1065.4	1061.7	1052.5	1052.5	1057.8
37.5°	1012.2	1010.5	1004.7	1003.7	1005.1
40°	977.3	975.4	967.8	969.7	969.7
42.5°	941.9	940.0	932.4	930.1	932.9
45°	883.4	885.3	876.1	874.2	876.1
47.5°	825.9	825.9	818.5	813.3	816.0
50°	786.1	786.1	778.7	775.2	775.2
52.5°	744.9	746.4	737.4	732.5	734.0
55°	685.1	685.1	675.9	670.5	672.2
57.5°	618.8	618.8	609.8	604.3	607.5
60°	574.9	574.9	565.7	560.1	562.1
62.5°	530.8	530.8	521.7	516.2	516.4
65°	462.8	461.1	453.6	448.0	448.0
67.5°	397.4	392.7	387.1	379.9	379.9
70°	349.0	347.0	341.5	334.2	334.2
72.5°	304.9	301.6	296.0	290.2	290.2
75°	236.8	234.9	229.6	226.0	224.0
77.5°	169.8	168.2	167.8	162.7	164.2
80°	128.6	128.6	126.9	123.1	123.1
82.5°	91.8	93.2	90.0	89.2	87.7
85°	38.4	42.1	44.2	45.8	45.8
87.5°	7.5	11.5	10.3	11.8	11.8
90°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)