

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: P844959

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844959
REPORT IS A COMBINATION OF REPORTS P700109 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-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

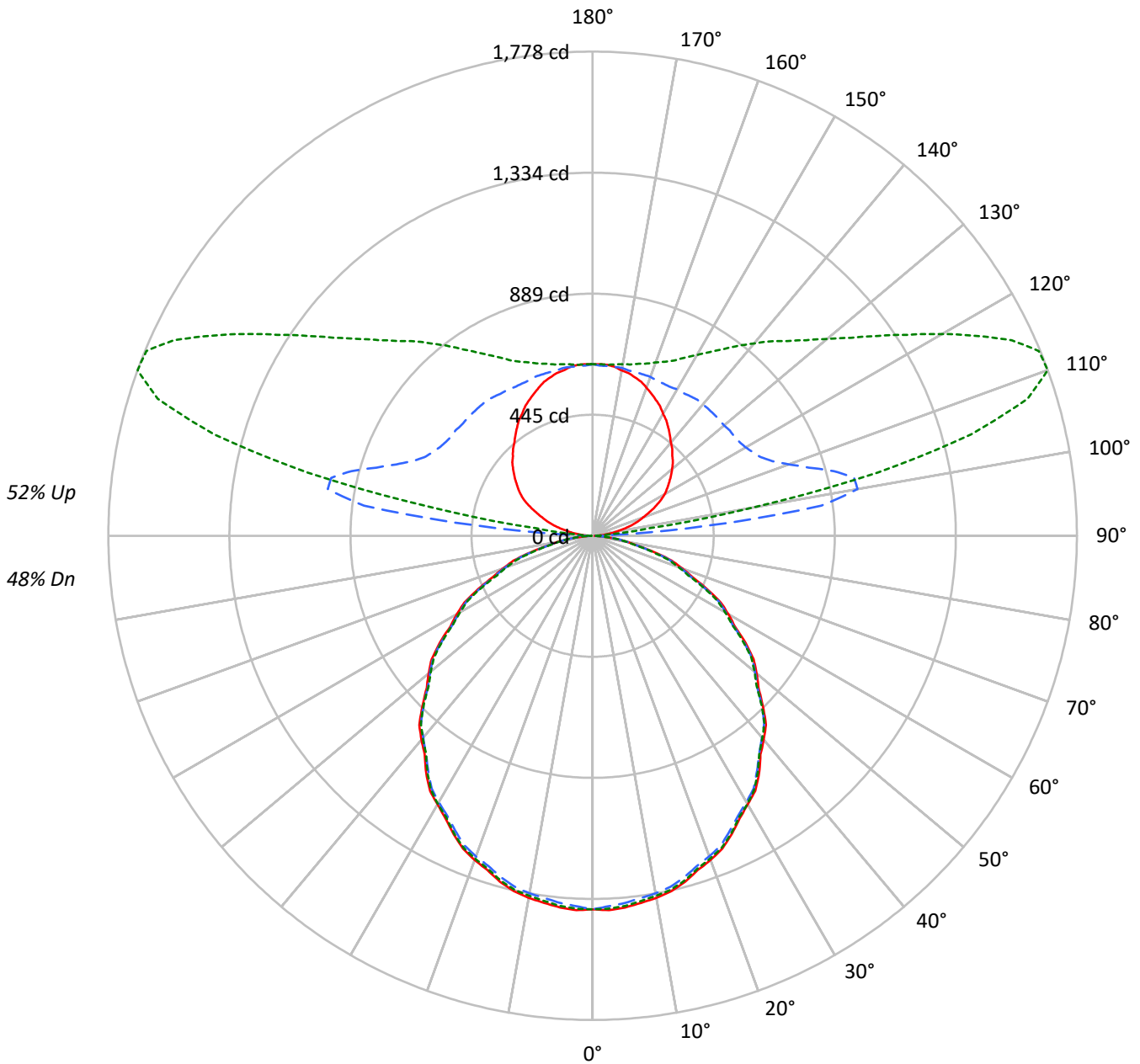
Lumens per Lamp: N/A
Luminaire Lumens: 7836.2 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.9
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48																
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46	40	40	40	40																
2	89	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38	34	34	34	34																
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	33	28	28	28	28																
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24	24	24	24																
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24	21	21	21	21																
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18	18	18	18																
7	58	45	37	32	53	42	35	30	36	30	26	30	26	22	25	21	19	16	16	16	16																
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14	14	14	14																
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13	13	13	13																
10	46	34	27	22	43	32	25	21	27	22	19	23	19	16	19	16	14	12	12	12	12																

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	1.7
10°-20°	368.6	4.7
20°-30°	553.7	7.1
30°-40°	660.9	8.4
40°-50°	677.3	8.6
50°-60°	604.0	7.7
60°-70°	449.8	5.7
70°-80°	244.2	3.1
80°-90°	58.1	0.7
90°-100°	250.8	3.2
100°-110°	872.7	11.1
110°-120°	845.4	10.8
120°-130°	663.2	8.5
130°-140°	524.9	6.7
140°-150°	405.1	5.2
150°-160°	290.4	3.7
160°-170°	177.6	2.3
170°-180°	60.1	0.8
0°-30°	1051.7	13.4
0°-40°	1712.6	21.9
0°-60°	2993.9	38.2
0°-90°	3745.9	47.8
90°-120°	1969.0	25.1
90°-150°	3562.1	45.5
90°-180°	4090.0	52.2
0°-180°	7836.2	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°	9	14	14	9	5	7
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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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°	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)