

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: P844949

Luminaire Tested: **SQ4P-F-100U-125D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844949
REPORT IS A COMBINATION OF REPORTS P700082 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-100U-125D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

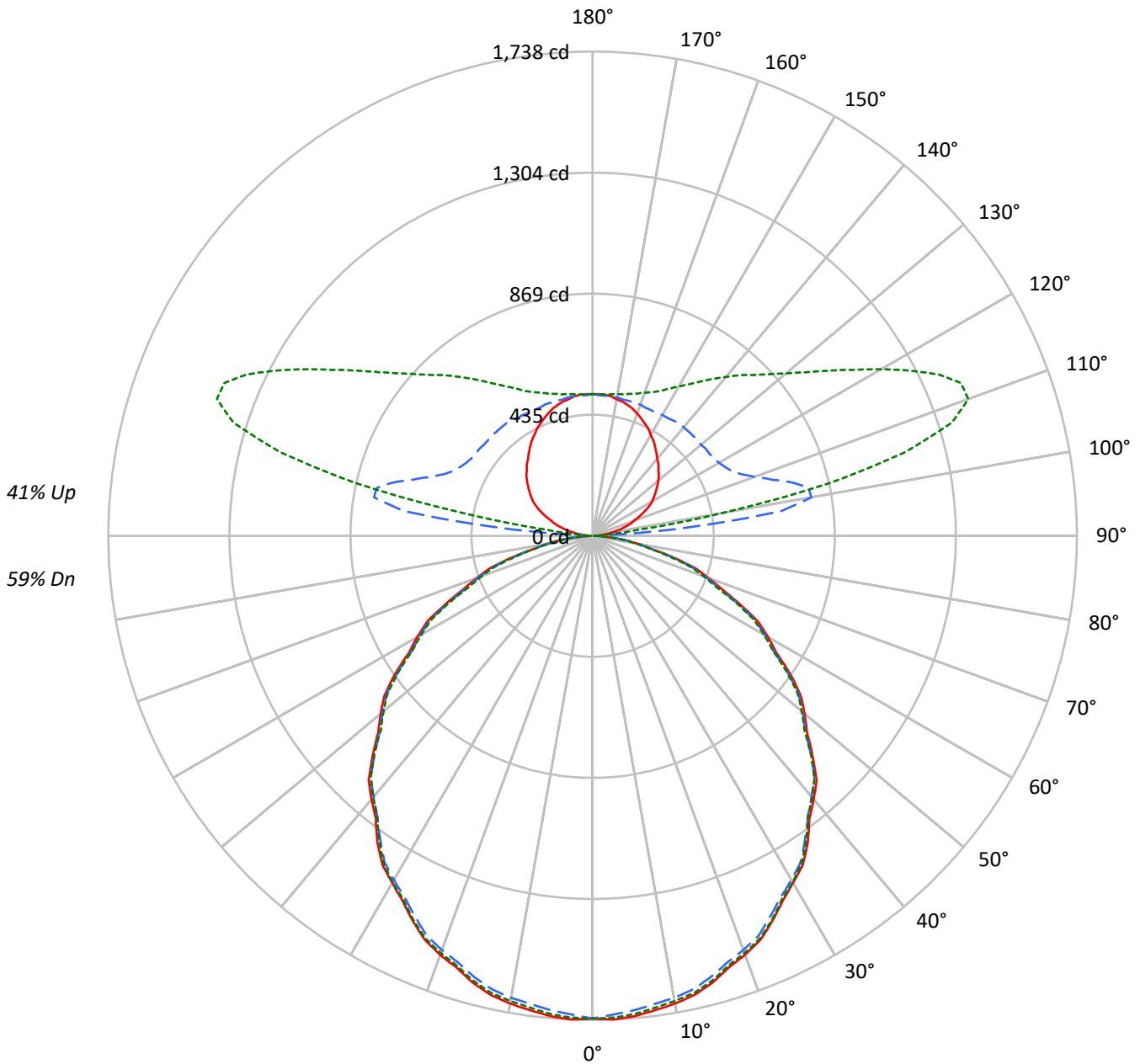
Lumens per Lamp: N/A
Luminaire Lumens: 8031.4 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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	76	76	76	64	64	64	59																			
1	100	95	91	88	93	89	86	83	77	75	73	67	65	63	57	56	54	50																			
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	68	62	56	60	55	50	52	48	44	44	41	39	35																			
4	76	65	57	50	70	61	53	48	53	47	43	46	42	38	39	36	33	30																			
5	69	58	49	43	65	54	47	41	47	41	37	41	36	33	35	32	29	26																			
6	64	52	43	37	59	49	41	36	43	37	32	37	32	29	32	28	25	23																			
7	59	47	38	33	55	44	37	31	39	33	28	34	29	25	29	25	23	20																			
8	55	42	34	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18																			
9	51	39	31	26	48	36	30	25	32	27	23	28	24	20	25	21	18	16																			
10	48	35	28	23	45	34	27	22	30	24	20	26	22	18	23	19	16	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15986	15986	15986
5°	16028	15835	15962
10°	15972	15777	15886
15°	15862	15664	15798
20°	15712	15532	15646
25°	15537	15349	15493
30°	15322	15198	15296
35°	15156	14973	15049
40°	14867	14723	14753
45°	14559	14439	14439
50°	14252	14119	14053
55°	13919	13732	13658
60°	13400	13184	13099
65°	12760	12509	12354
70°	11888	11635	11386
75°	10662	10334	10085
80°	8629	8517	8257
85°	5124	5907	6129



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.5	2.0
10°-20°	465.6	5.8
20°-30°	699.3	8.7
30°-40°	834.8	10.4
40°-50°	855.4	10.7
50°-60°	762.9	9.5
60°-70°	568.1	7.1
70°-80°	308.4	3.8
80°-90°	72.6	0.9
90°-100°	202.4	2.5
100°-110°	704.3	8.8
110°-120°	682.2	8.5
120°-130°	535.2	6.7
130°-140°	423.6	5.3
140°-150°	326.9	4.1
150°-160°	234.3	2.9
160°-170°	143.3	1.8
170°-180°	48.5	0.6
0°-30°	1328.4	16.5
0°-40°	2163.2	26.9
0°-60°	3781.5	47.1
0°-90°	4730.7	58.9
90°-120°	1588.9	19.8
90°-150°	2874.6	35.8
90°-180°	3301.0	41.1
0°-180°	8031.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1733	1733	1733	1733	1733	
5°	1731	1728	1710	1726	1724	164
15°	1661	1656	1640	1654	1654	468
25°	1526	1522	1508	1517	1522	703
35°	1346	1341	1329	1329	1336	840
45°	1116	1118	1107	1104	1107	861
55°	865	865	854	847	849	771
65°	584	582	573	566	566	579
75°	299	297	290	285	283	316
85°	48	53	56	58	58	68
90°	8	11	11	8	4	6
95°	34	118	342	87	53	36
105°	118	167	740	1249	1162	124
115°	205	247	550	1162	1370	202
125°	277	342	512	865	1032	248
135°	334	376	509	721	816	259
145°	391	418	505	622	676	245
155°	444	459	497	554	573	205
165°	486	490	501	524	528	137
175°	509	509	505	512	509	48
180°	509	509	509	509	509	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1738.2	1734.7	1719.8	1732.7	1731.2
5°	1730.6	1728.1	1709.8	1725.7	1723.5
7.5°	1717.9	1713.6	1695.2	1711.1	1708.7
10°	1704.9	1700.3	1684.0	1697.8	1695.7
12.5°	1688.4	1685.7	1667.6	1681.4	1680.8
15°	1660.7	1656.1	1639.9	1654.0	1654.0
17.5°	1624.7	1622.1	1606.1	1619.3	1618.0
20°	1600.3	1596.0	1581.9	1593.6	1593.6
22.5°	1570.9	1568.2	1554.4	1563.8	1565.7
25°	1526.2	1521.9	1507.8	1517.3	1521.9
27.5°	1477.2	1473.7	1462.1	1467.9	1471.3
30°	1438.2	1438.2	1426.6	1429.0	1435.8
32.5°	1403.0	1403.0	1389.5	1391.9	1395.1
35°	1345.6	1341.0	1329.4	1329.4	1336.1
37.5°	1278.5	1276.3	1269.0	1267.6	1269.5
40°	1234.4	1231.9	1222.4	1224.9	1224.9
42.5°	1189.6	1187.2	1177.8	1174.8	1178.3
45°	1115.8	1118.2	1106.6	1104.1	1106.6
47.5°	1043.2	1043.2	1033.8	1027.2	1030.7
50°	992.9	992.9	983.7	979.1	979.1
52.5°	940.9	942.8	931.4	925.1	927.0
55°	865.3	865.3	853.7	846.9	849.1
57.5°	781.7	781.7	770.2	763.3	767.3
60°	726.2	726.2	714.5	707.5	709.9
62.5°	670.4	670.4	659.0	651.9	652.2
65°	584.5	582.3	573.0	565.9	565.9
67.5°	502.0	496.0	489.0	479.8	479.8
70°	440.7	438.3	431.3	422.1	422.1
72.5°	385.0	381.0	373.9	366.6	366.6
75°	299.1	296.7	289.9	285.3	282.9
77.5°	214.4	212.5	212.0	205.5	207.4
80°	162.4	162.4	160.3	155.4	155.4
82.5°	115.9	117.8	113.7	112.6	110.8
85°	48.4	53.0	55.8	57.9	57.9
87.5°	9.5	14.6	13.0	14.9	14.9
90°	7.6	11.4	11.4	7.6	3.8
92.5°	19.0	57.0	53.1	22.8	19.0
95°	34.2	117.6	341.6	87.3	53.1
97.5°	53.1	132.9	683.2	311.3	167.0
100°	72.1	140.4	797.0	747.7	482.0
102.5°	94.9	151.8	793.2	1051.4	865.3
105°	117.6	167.0	740.1	1248.7	1161.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	182.2	223.9	577.0	1256.3	1431.0
115°	204.9	246.7	550.3	1161.5	1370.2
117.5°	227.7	273.3	535.2	1074.2	1282.9
120°	246.7	296.0	523.8	990.6	1195.6
122.5°	261.9	318.8	516.2	922.3	1108.3
125°	277.0	341.6	512.4	865.3	1032.4
127.5°	292.3	356.8	512.4	823.7	964.1
130°	307.5	364.4	508.6	781.9	907.1
132.5°	322.6	368.1	508.6	751.5	857.8
135°	334.0	375.8	508.6	721.2	816.0
137.5°	349.2	383.3	508.6	694.6	781.9
140°	360.6	394.8	508.6	668.0	743.9
142.5°	375.8	406.1	508.6	641.5	709.8
145°	390.9	417.6	504.8	622.5	675.6
147.5°	406.1	428.9	501.0	603.5	645.3
150°	417.6	440.3	501.0	584.5	618.6
152.5°	432.7	451.7	497.2	565.5	595.9
155°	444.1	459.2	497.2	554.2	573.1
157.5°	455.4	470.7	497.2	542.8	558.0
160°	466.9	478.2	501.0	535.2	546.5
162.5°	478.2	485.9	501.0	527.5	535.2
165°	485.9	489.7	501.0	523.8	527.5
167.5°	493.4	497.2	501.0	520.0	520.0
170°	497.2	501.0	504.8	516.2	516.2
172.5°	504.8	504.8	504.8	512.4	512.4
175°	508.6	508.6	504.8	512.4	508.6
177.5°	508.6	508.6	504.8	512.4	508.6
180°	508.6	508.6	508.6	508.6	508.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	140.4	186.0	671.8	1336.0	1351.2
110°	159.4	204.9	618.6	1324.7	1434.7



(END OF REPORT)