

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: P845285

Luminaire Tested: **SQ4P-PW1-100U-125D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845285
REPORT IS A COMBINATION OF REPORTS P700098 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-100U-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

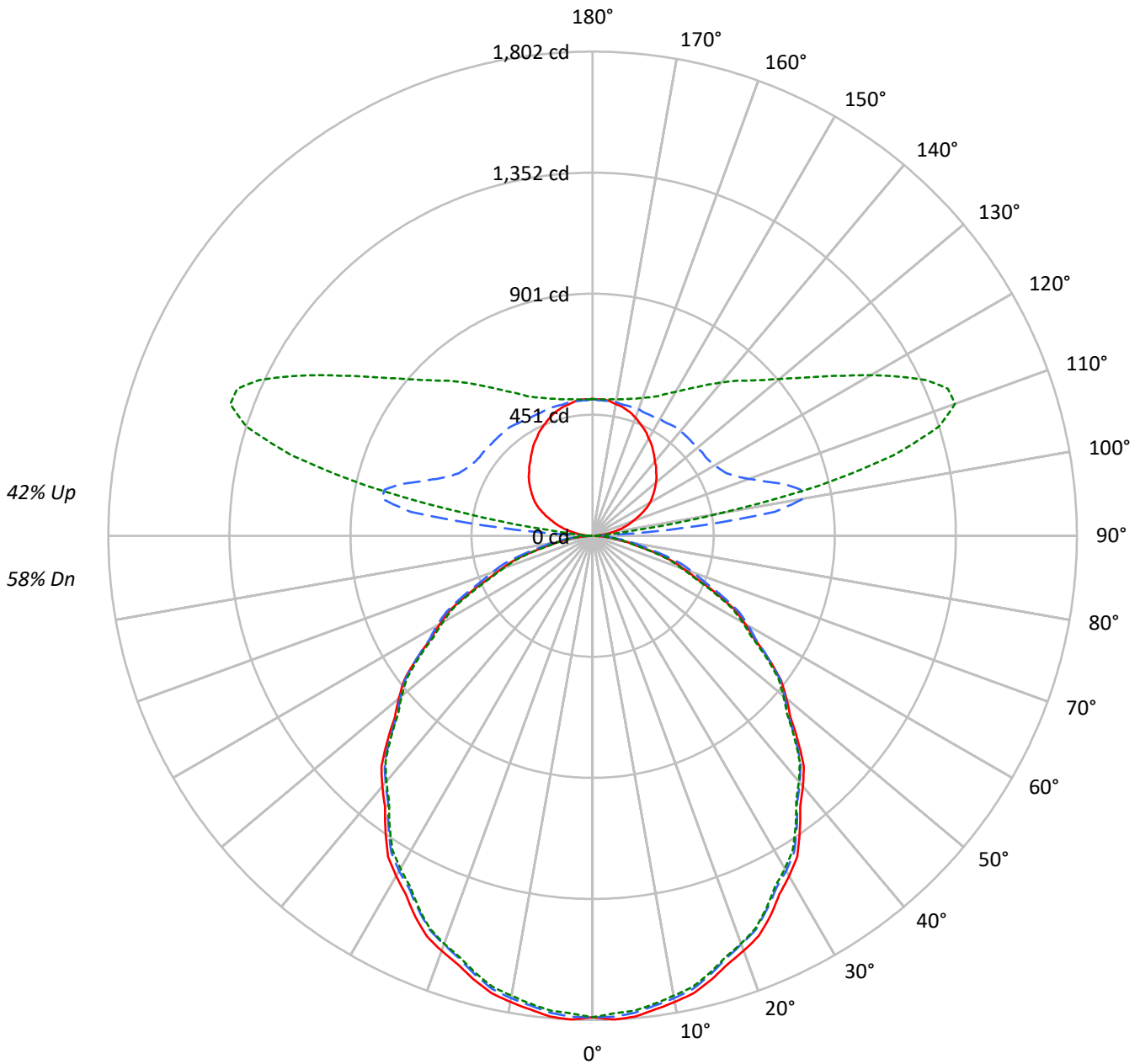
Lumens per Lamp: N/A
Luminaire Lumens: 7861.2 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	63	63	63	58																			
1	100	95	91	88	93	89	86	83	77	75	72	66	65	63	56	55	54	49																			
2	91	83	77	72	84	78	73	68	68	64	60	58	55	53	50	47	46	41																			
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	44	41	39	35																			
4	76	65	57	51	71	61	54	48	53	48	43	46	42	38	39	36	33	30																			
5	70	58	50	44	65	54	47	42	48	42	37	41	37	33	36	32	29	26																			
6	64	52	44	38	60	49	42	36	43	37	33	37	33	29	32	29	26	23																			
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	26	23	20																			
8	55	43	35	30	51	40	33	28	36	30	26	31	27	23	27	23	21	18																			
9	51	39	32	26	48	37	30	25	33	27	23	29	24	21	25	21	19	16																			
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16532	16532	16532
5°	16640	16509	16435
10°	16506	16373	16284
15°	16331	16151	16091
20°	16136	15888	15859
25°	15911	15622	15572
30°	15575	15341	15239
35°	15133	14918	14830
40°	14661	14432	14377
45°	14089	13906	13842
50°	13508	13395	13301
55°	12875	12875	12672
60°	12092	12324	11887
65°	11062	11614	10789
70°	9749	10688	9501
75°	8334	9564	8099
80°	6461	8055	6551
85°	4171	6193	5505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.7	2.1
10°-20°	476.4	6.1
20°-30°	706.6	9.0
30°-40°	826.8	10.5
40°-50°	823.2	10.5
50°-60°	710.8	9.0
60°-70°	511.7	6.5
70°-80°	268.3	3.4
80°-90°	67.8	0.9
90°-100°	202.4	2.6
100°-110°	704.3	9.0
110°-120°	682.2	8.7
120°-130°	535.2	6.8
130°-140°	423.6	5.4
140°-150°	326.9	4.2
150°-160°	234.3	3.0
160°-170°	143.3	1.8
170°-180°	48.5	0.6
0°-30°	1351.8	17.2
0°-40°	2178.6	27.7
0°-60°	3712.6	47.2
0°-90°	4560.4	58.0
90°-120°	1588.9	20.2
90°-150°	2874.6	36.6
90°-180°	3301.0	42.0
0°-180°	7861.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1797	1777	1783	1778	1775	170
15°	1710	1688	1691	1688	1685	482
25°	1563	1537	1535	1525	1530	719
35°	1344	1325	1324	1312	1317	840
45°	1080	1071	1066	1062	1061	833
55°	800	799	800	790	788	714
65°	507	522	532	511	494	502
75°	234	255	268	250	227	250
85°	39	52	58	55	52	52
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°	1791.9	1791.9	1791.9	1791.9	1791.9
2.5°	1802.1	1787.2	1791.9	1788.0	1779.3
5°	1796.7	1776.6	1782.6	1777.7	1774.6
7.5°	1778.4	1760.0	1764.1	1759.2	1757.2
10°	1761.9	1743.3	1747.7	1741.5	1738.2
12.5°	1743.1	1723.3	1727.6	1721.0	1719.4
15°	1709.8	1688.1	1690.9	1687.5	1684.6
17.5°	1671.3	1649.5	1649.8	1644.9	1644.0
20°	1643.5	1620.3	1618.2	1611.9	1615.2
22.5°	1613.3	1588.8	1586.6	1577.9	1582.2
25°	1563.0	1536.8	1534.6	1525.1	1529.7
27.5°	1504.9	1479.1	1479.1	1465.8	1470.7
30°	1462.0	1437.2	1440.0	1424.1	1430.4
32.5°	1416.5	1394.2	1395.5	1380.1	1386.3
35°	1343.6	1325.1	1324.5	1312.1	1316.7
37.5°	1269.0	1252.7	1249.9	1242.9	1244.0
40°	1217.3	1203.4	1198.3	1193.7	1193.7
42.5°	1162.8	1150.4	1145.2	1141.7	1140.5
45°	1079.8	1070.6	1065.8	1062.4	1060.9
47.5°	997.6	989.2	984.9	982.7	981.1
50°	941.1	934.8	933.2	928.3	926.7
52.5°	884.2	880.4	878.8	872.8	871.1
55°	800.4	799.0	800.4	789.5	787.8
57.5°	713.3	715.7	720.9	705.9	702.1
60°	655.3	661.3	667.9	650.5	644.2
62.5°	595.8	605.8	614.7	594.7	586.0
65°	506.7	522.3	532.0	511.1	494.2
67.5°	421.0	440.1	451.8	429.5	410.1
70°	361.4	383.2	396.2	373.6	352.2
72.5°	309.7	333.9	344.6	323.0	301.5
75°	233.8	255.3	268.3	250.4	227.2
77.5°	165.8	186.1	197.0	181.5	162.2
80°	121.6	143.2	151.6	138.6	123.3
82.5°	86.3	104.2	110.0	102.1	91.4
85°	39.4	51.7	58.5	55.3	52.0
87.5°	10.1	18.8	24.0	24.0	25.3
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)