

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P701273

Luminaire Tested: SQ4P-WB-100U-100D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701273
REPORT IS A COMBINATION OF REPORTS P700101 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-100U-100D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1000 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

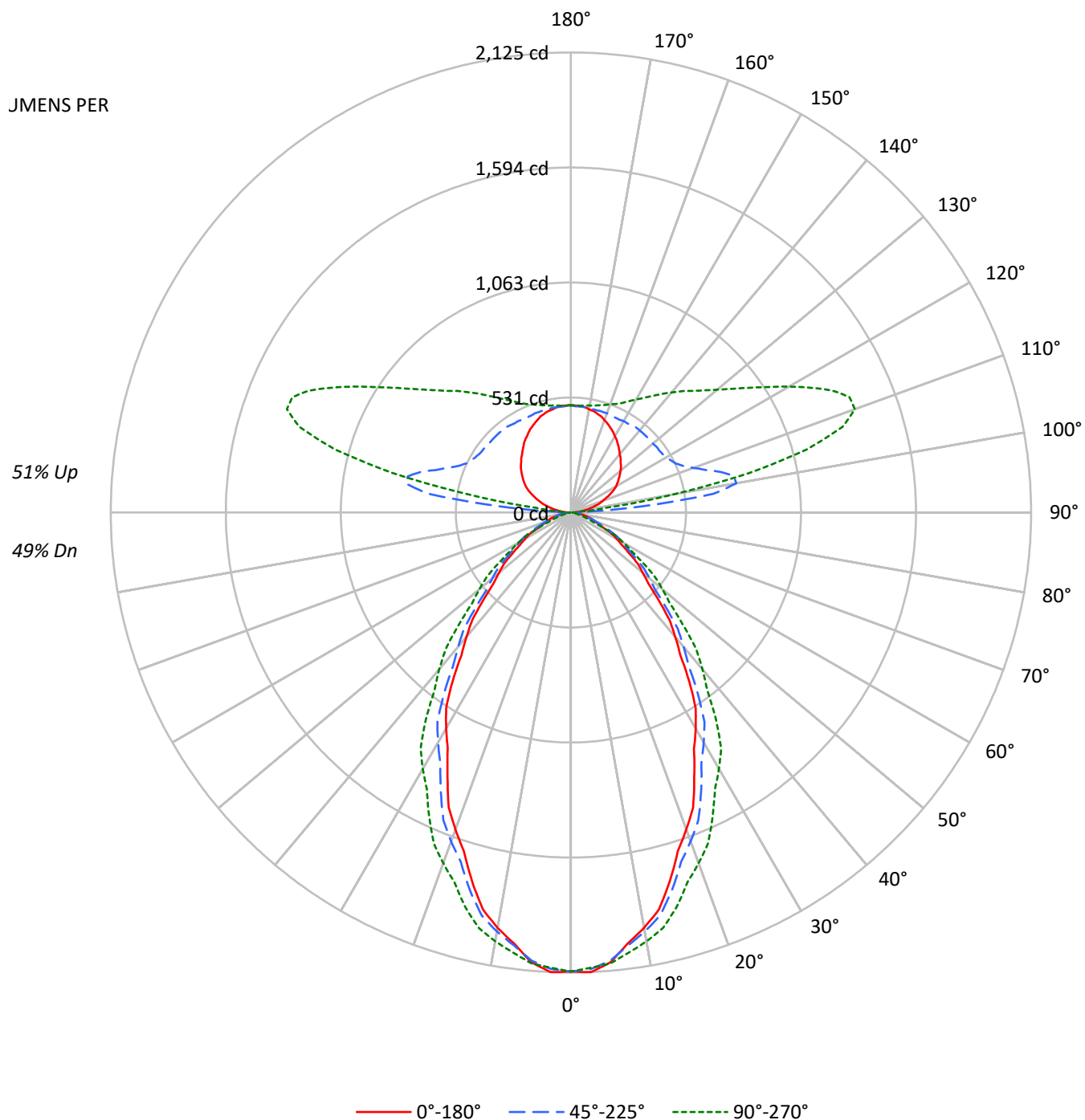
Lumens per Lamp: N/A
Luminaire Lumens: 6301.8 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.9
Input Voltage (V): NR
Input Current (Ain): 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: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83	68	68	68	55	55	55
1	99	95	91	88	91	88	85	82	74	72	70	62	60	59	51	50	49
2	91	84	79	74	84	78	73	69	66	63	60	56	53	51	46	44	43
3	84	75	68	63	77	70	64	59	60	55	52	50	47	45	42	40	38
4	77	67	60	54	71	63	56	51	54	49	45	46	42	39	38	36	34
5	71	61	53	48	66	56	50	45	49	44	40	42	38	35	35	32	30
6	66	55	47	42	61	51	45	40	44	39	36	38	34	31	32	29	27
7	61	50	43	37	57	47	40	35	41	36	32	35	31	28	30	27	25
8	57	46	38	33	53	43	36	32	38	32	29	32	29	26	28	25	23
9	54	42	35	30	50	39	33	29	35	30	26	30	26	23	26	23	21
10	50	39	32	27	47	37	30	26	32	27	24	28	24	21	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19560	19560	19560
5°	19317	19247	19360
10°	18249	18415	18842
15°	16846	17239	18012
20°	15299	15873	16924
25°	13723	14471	15768
30°	12271	13071	14568
35°	10728	11503	13151
40°	9029	9747	11384
45°	7452	8095	9504
50°	6221	6783	7916
55°	5282	5820	6537
60°	4515	5047	5218
65°	3596	4244	3369
70°	3186	3313	2058
75°	2948	2688	1262
80°	2720	2476	1089
85°	2445	2276	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9504 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	3.1
10°-20°	505.8	8.0
20°-30°	655.2	10.4
30°-40°	641.6	10.2
40°-50°	491.1	7.8
50°-60°	327.2	5.2
60°-70°	178.6	2.8
70°-80°	74.4	1.2
80°-90°	22.3	0.4
90°-100°	196.9	3.1
100°-110°	685.2	10.9
110°-120°	663.7	10.5
120°-130°	520.7	8.3
130°-140°	412.1	6.5
140°-150°	318.0	5.0
150°-160°	228.0	3.6
160°-170°	139.4	2.2
170°-180°	47.2	0.7
0°-30°	1355.4	21.5
0°-40°	1997.0	31.7
0°-60°	2815.3	44.7
0°-90°	3090.5	49.0
90°-120°	1545.9	24.5
90°-150°	2796.7	44.4
90°-180°	3211.0	51.0
0°-180°	6301.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2086	2065	2078	2083	2090	194
15°	1764	1757	1805	1854	1886	493
25°	1348	1352	1422	1483	1549	620
35°	952	957	1021	1090	1168	592
45°	571	582	620	667	728	445
55°	328	342	362	376	406	298
65°	165	178	194	170	154	171
75°	83	83	75	52	35	88
85°	23	23	22	14	8	25
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2120.1	2120.1	2120.1	2120.1	2120.1
2.5°	2125.3	2106.4	2111.2	2111.0	2105.1
5°	2085.7	2064.7	2078.2	2082.9	2090.4
7.5°	2008.2	1992.4	2017.1	2035.1	2049.9
10°	1947.9	1934.3	1965.6	1992.2	2011.2
12.5°	1878.1	1866.4	1905.5	1940.8	1965.9
15°	1763.7	1757.4	1804.8	1853.9	1885.7
17.5°	1641.6	1638.4	1692.7	1750.0	1790.7
20°	1558.2	1557.3	1616.7	1676.5	1723.7
22.5°	1474.1	1476.0	1538.6	1600.7	1654.6
25°	1348.0	1351.6	1421.5	1483.4	1548.9
27.5°	1231.3	1233.1	1305.0	1370.5	1440.4
30°	1151.8	1156.1	1226.9	1294.8	1367.4
32.5°	1072.2	1077.4	1146.7	1216.6	1290.8
35°	952.5	957.2	1021.3	1090.3	1167.6
37.5°	829.3	835.6	892.7	957.5	1033.8
40°	749.7	759.0	809.3	870.6	945.2
42.5°	673.1	684.4	731.2	789.3	856.4
45°	571.1	582.1	620.4	667.4	728.4
47.5°	483.3	495.9	525.4	565.9	617.9
50°	433.4	445.4	472.6	502.5	551.5
52.5°	389.6	401.4	425.7	448.8	490.7
55°	328.4	342.0	361.8	375.7	406.4
57.5°	278.2	291.2	307.0	313.1	331.9
60°	244.7	259.2	273.5	272.8	282.8
62.5°	214.2	226.6	240.7	230.8	231.4
65°	164.7	178.4	194.4	169.9	154.3
67.5°	133.1	135.9	152.5	118.5	100.1
70°	118.1	118.1	122.8	91.8	76.3
72.5°	104.1	104.1	99.9	74.5	58.4
75°	82.7	82.7	75.4	51.8	35.4
77.5°	63.8	63.2	57.7	38.6	25.7
80°	51.2	51.2	46.6	30.6	20.5
82.5°	40.0	40.0	36.0	23.8	15.1
85°	23.1	23.1	21.5	13.9	8.4
87.5°	8.2	8.2	7.3	4.4	3.8
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
107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8

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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

(END OF REPORT)