

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: P701281

Luminaire Tested: SQ4P-WB-150U-100D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701281
REPORT IS A COMBINATION OF REPORTS P700157 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-150U-100D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1000 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

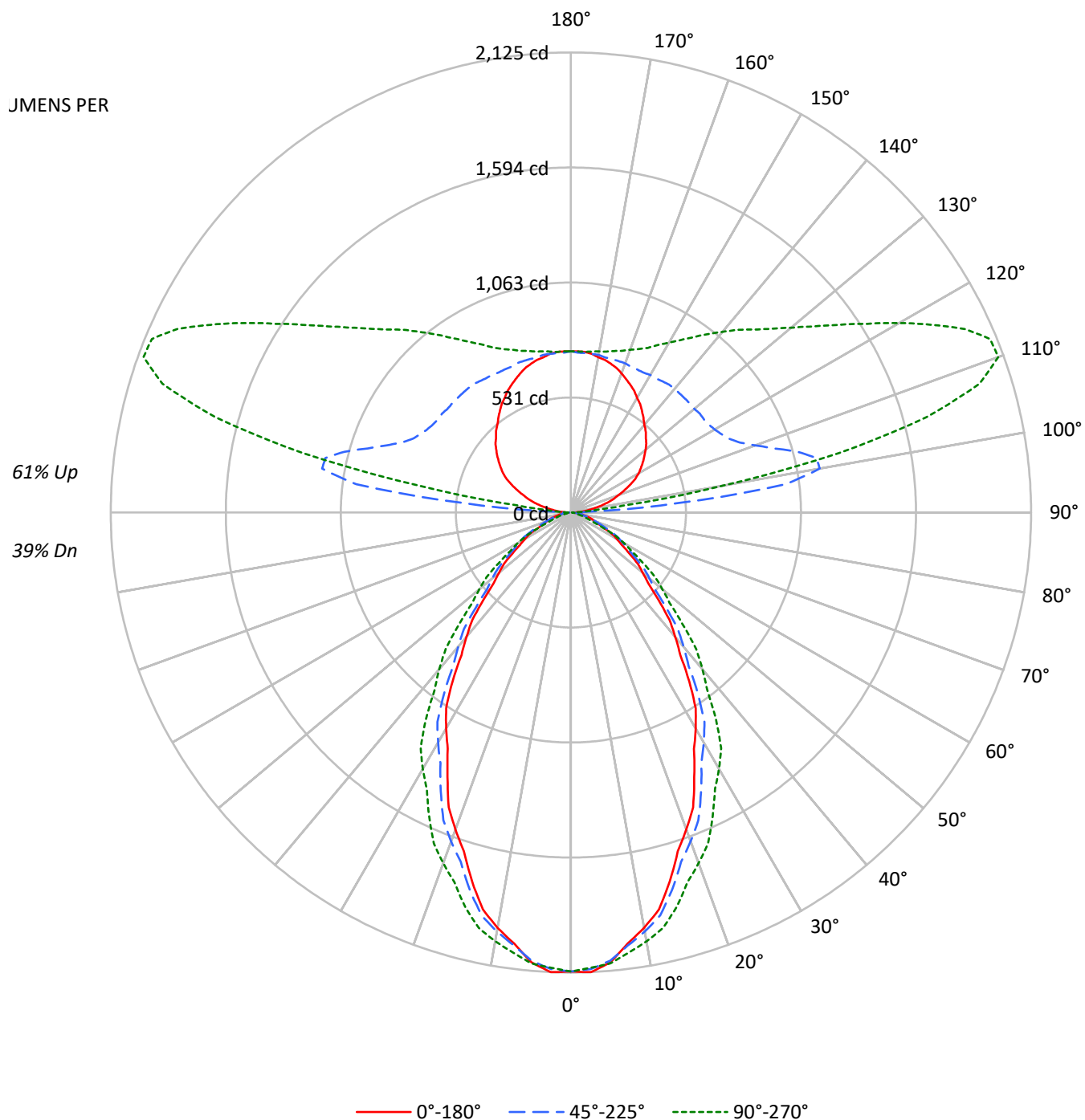
Lumens per Lamp: N/A
Luminaire Lumens: 7923.3 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 77.9
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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46
1	96	92	89	86	87	84	81	79	69	67	65	55	54	52	42	41	41
2	88	82	76	71	80	75	70	66	61	58	55	49	47	45	38	37	36
3	81	73	66	61	74	66	61	56	55	51	48	44	42	39	35	33	31
4	75	65	58	52	68	60	53	48	50	45	41	40	37	35	32	30	28
5	69	58	51	45	63	54	47	42	45	40	36	37	33	31	29	27	25
6	64	53	45	40	58	48	42	37	41	36	32	33	30	27	27	24	22
7	59	48	40	35	54	44	38	33	37	32	29	31	27	25	25	22	20
8	55	44	36	31	50	40	34	30	34	29	26	28	25	22	23	20	19
9	51	40	33	28	47	37	31	27	31	27	23	26	23	20	21	19	17
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	16

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	2.5
10°-20°	505.8	6.4
20°-30°	655.2	8.3
30°-40°	641.6	8.1
40°-50°	491.1	6.2
50°-60°	327.2	4.1
60°-70°	178.6	2.3
70°-80°	74.4	0.9
80°-90°	22.9	0.3
90°-100°	296.3	3.7
100°-110°	1031.0	13.0
110°-120°	998.8	12.6
120°-130°	783.5	9.9
130°-140°	620.1	7.8
140°-150°	478.6	6.0
150°-160°	343.1	4.3
160°-170°	209.8	2.6
170°-180°	71.0	0.9
0°-30°	1355.4	17.1
0°-40°	1997.0	25.2
0°-60°	2815.3	35.5
0°-90°	3091.1	39.0
90°-120°	2326.1	29.4
90°-150°	4208.3	53.1
90°-180°	4832.0	61.0
0°-180°	7923.3	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°	11	17	17	11	6	8
95°	50	172	500	128	78	53
105°	172	244	1084	1828	1700	181
115°	300	361	806	1700	2006	296
125°	406	500	750	1267	1511	363
135°	489	550	745	1056	1195	379
145°	572	611	739	911	989	358
155°	650	672	728	811	839	300
165°	711	717	733	767	772	201
175°	745	745	739	750	745	71
180°	745	745	745	745	745	

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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°	11.1	16.7	16.7	11.1	5.5
92.5°	27.8	83.3	77.8	33.3	27.8
95°	50.0	172.2	500.1	127.8	77.8
97.5°	77.8	194.5	1000.2	455.6	244.5
100°	105.6	205.5	1166.9	1094.6	705.6
102.5°	138.9	222.3	1161.3	1539.1	1266.9
105°	172.2	244.5	1083.5	1828.1	1700.3
107.5°	205.5	272.3	983.5	1955.8	1978.1
110°	233.3	300.1	905.7	1939.2	2100.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	327.9	844.5	1839.2	2094.7
115°	300.1	361.2	805.7	1700.3	2005.9
117.5°	333.4	400.0	783.4	1572.5	1878.1
120°	361.2	433.4	766.8	1450.2	1750.3
122.5°	383.4	466.8	755.7	1350.3	1622.4
125°	405.7	500.1	750.1	1266.9	1511.3
127.5°	427.8	522.3	750.1	1205.7	1411.4
130°	450.1	533.4	744.6	1144.6	1328.0
132.5°	472.3	538.9	744.6	1100.2	1255.7
135°	489.0	550.1	744.6	1055.7	1194.6
137.5°	511.2	561.2	744.6	1016.9	1144.6
140°	527.9	577.9	744.6	977.9	1089.0
142.5°	550.1	594.5	744.6	939.1	1039.0
145°	572.4	611.2	739.0	911.3	989.1
147.5°	594.5	627.9	733.4	883.5	944.6
150°	611.2	644.5	733.4	855.7	905.7
152.5°	633.5	661.2	727.9	827.9	872.3
155°	650.1	672.3	727.9	811.2	839.0
157.5°	666.8	689.0	727.9	794.6	816.8
160°	683.5	700.1	733.4	783.4	800.1
162.5°	700.1	711.3	733.4	772.4	783.4
165°	711.3	716.8	733.4	766.8	772.4
167.5°	722.3	727.9	733.4	761.2	761.2
170°	727.9	733.4	739.0	755.7	755.7
172.5°	739.0	739.0	739.0	750.1	750.1
175°	744.6	744.6	739.0	750.1	744.6
177.5°	744.6	744.6	739.0	750.1	744.6
180°	744.6	744.6	744.6	744.6	744.6

(END OF REPORT)