

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: P701277

Luminaire Tested: SQ4P-WB-125U-100D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701277
REPORT IS A COMBINATION OF REPORTS P700129 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-125U-100D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 1000 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

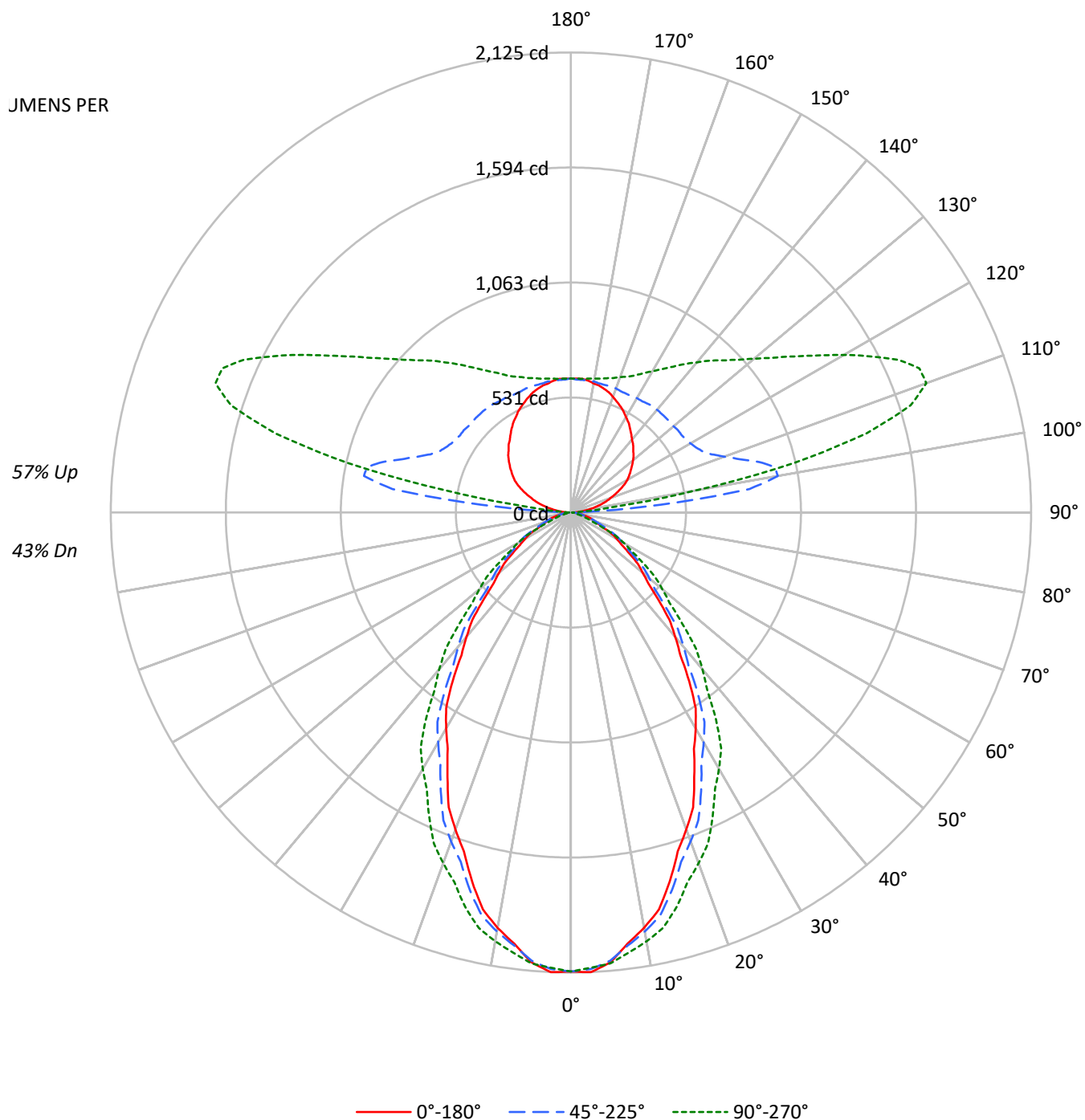
Lumens per Lamp: N/A
Luminaire Lumens: 7109.2 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.9
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

TEST NUMBER: P701277

CATALOG NUMBER: SQ4P-WB-125U-100D-B50-1D-UNV-

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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	97	93	90	87	89	86	83	80	71	69	67	58	57	55	46	45	44
2	89	83	77	73	82	76	71	67	64	60	57	52	50	48	42	40	39
3	82	74	67	62	75	68	62	58	57	53	50	47	44	42	38	36	34
4	76	66	59	53	69	61	55	50	51	47	43	43	39	37	35	32	30
5	70	59	52	46	64	55	48	43	47	42	38	39	35	33	32	29	27
6	65	54	46	41	59	50	43	38	42	37	34	36	32	29	29	27	25
7	60	49	41	36	55	45	39	34	39	34	30	33	29	26	27	24	22
8	56	45	37	32	51	41	35	31	36	31	27	30	26	24	25	22	20
9	52	41	34	29	48	38	32	28	33	28	25	28	24	22	23	21	19
10	49	38	31	26	45	35	29	25	30	26	22	26	22	20	22	19	17

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

TEST NUMBER: P701277

CATALOG NUMBER: SQ4P-WB-125U-100D-B50-1D-UNV-

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	2.7
10°-20°	505.8	7.1
20°-30°	655.2	9.2
30°-40°	641.6	9.0
40°-50°	491.1	6.9
50°-60°	327.2	4.6
60°-70°	178.6	2.5
70°-80°	74.4	1.0
80°-90°	22.6	0.3
90°-100°	246.4	3.5
100°-110°	857.4	12.1
110°-120°	830.6	11.7
120°-130°	651.5	9.2
130°-140°	515.7	7.3
140°-150°	398.0	5.6
150°-160°	285.3	4.0
160°-170°	174.5	2.5
170°-180°	59.0	0.8
0°-30°	1355.4	19.1
0°-40°	1997.0	28.1
0°-60°	2815.3	39.6
0°-90°	3090.8	43.5
90°-120°	1934.4	27.2
90°-150°	3499.5	49.2
90°-180°	4018.0	56.5
0°-180°	7109.2	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°	9	14	14	9	5	7
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	

TEST NUMBER: P701277

CATALOG NUMBER: SQ4P-WB-125U-100D-B50-1D-UNV-

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°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9
107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6

TEST NUMBER: P701277

CATALOG NUMBER: SQ4P-WB-125U-100D-B50-1D-UNV-

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2

(END OF REPORT)