

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: P701257

Luminaire Tested: SQ4P-WB-025U-100D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701257
REPORT IS A COMBINATION OF REPORTS P700185 AND P700243
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-025U-100D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT UPLIGHT, 1000 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

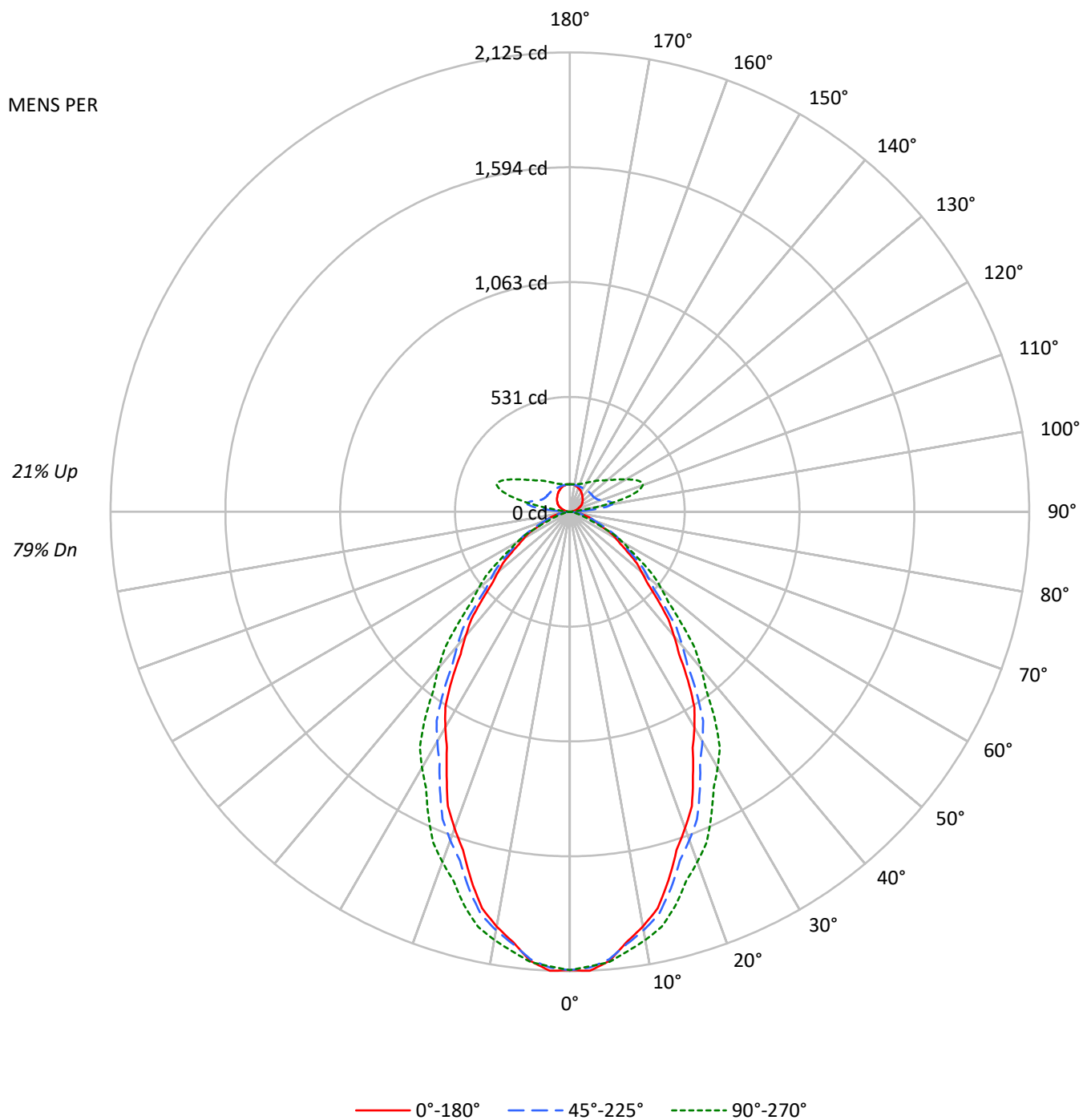
Lumens per Lamp: N/A
Luminaire Lumens: 3917.6 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 41.9
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: P701257

CATALOG NUMBER: SQ4P-WB-025U-100D-B50-1D-UNV-

Luminous Intensity Polar Plot



TEST NUMBER: P701257

CATALOG NUMBER: SQ4P-WB-025U-100D-B50-1D-UNV-

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	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83
1	106	102	99	96	101	98	95	92	90	88	86	83	81	79	76	75	73
2	98	91	86	81	94	88	83	79	81	77	74	75	72	69	69	67	65
3	91	82	76	70	87	79	73	68	73	69	65	68	64	61	63	60	57
4	84	74	67	61	81	72	65	60	67	61	57	62	58	54	58	54	51
5	78	67	60	54	75	65	58	53	61	55	51	57	52	48	53	49	46
6	73	62	54	48	70	60	53	47	56	50	45	52	47	44	49	45	42
7	68	56	49	44	65	55	48	43	51	45	41	48	43	39	45	41	38
8	64	52	45	40	61	50	44	39	48	42	37	45	40	36	42	38	35
9	60	48	41	36	58	47	40	36	44	38	34	42	37	33	39	35	32
10	56	45	38	33	54	44	37	33	41	35	32	39	34	30	37	33	29

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: P701257

CATALOG NUMBER: SQ4P-WB-025U-100D-B50-1D-UNV-

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	5.0
10°-20°	505.8	12.9
20°-30°	655.2	16.7
30°-40°	641.6	16.4
40°-50°	491.1	12.5
50°-60°	327.2	8.4
60°-70°	178.6	4.6
70°-80°	74.4	1.9
80°-90°	21.4	0.5
90°-100°	50.8	1.3
100°-110°	176.7	4.5
110°-120°	171.2	4.4
120°-130°	134.2	3.4
130°-140°	106.3	2.7
140°-150°	82.0	2.1
150°-160°	58.8	1.5
160°-170°	36.0	0.9
170°-180°	12.2	0.3
0°-30°	1355.4	34.6
0°-40°	1997.0	51.0
0°-60°	2815.3	71.9
0°-90°	3089.6	78.9
90°-120°	398.6	10.2
90°-150°	721.1	18.4
90°-180°	828.0	21.1
0°-180°	3917.6	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°	2	3	3	2	1	2
95°	9	30	86	22	13	9
105°	30	42	186	313	291	31
115°	51	62	138	291	344	51
125°	70	86	128	217	259	62
135°	84	94	128	181	205	65
145°	98	105	127	156	170	61
155°	111	115	125	139	144	51
165°	122	123	126	131	132	34
175°	128	128	127	128	128	12
180°	128	128	128	128	128	

TEST NUMBER: P701257

CATALOG NUMBER: SQ4P-WB-025U-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°	1.9	2.9	2.9	1.9	1.0
92.5°	4.8	14.3	13.3	5.7	4.8
95°	8.6	29.5	85.7	21.9	13.3
97.5°	13.3	33.3	171.4	78.1	41.9
100°	18.1	35.2	199.9	187.5	120.9
102.5°	23.8	38.1	199.0	263.7	217.1
105°	29.5	41.9	185.6	313.3	291.4
107.5°	35.2	46.6	168.5	335.2	339.0
110°	40.0	51.4	155.2	332.4	360.0

TEST NUMBER: P701257

CATALOG NUMBER: SQ4P-WB-025U-100D-B50-1D-UNV-

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	45.7	56.2	144.7	315.2	359.0
115°	51.4	61.9	138.0	291.4	343.8
117.5°	57.1	68.5	134.2	269.4	321.9
120°	61.9	74.3	131.4	248.5	300.0
122.5°	65.7	80.0	129.5	231.3	278.1
125°	69.5	85.7	128.5	217.1	259.0
127.5°	73.3	89.5	128.5	206.6	241.8
130°	77.1	91.4	127.6	196.1	227.5
132.5°	80.9	92.3	127.6	188.5	215.2
135°	83.8	94.3	127.6	180.9	204.7
137.5°	87.6	96.2	127.6	174.2	196.1
140°	90.4	99.0	127.6	167.6	186.6
142.5°	94.3	101.9	127.6	160.9	178.0
145°	98.1	104.7	126.6	156.1	169.5
147.5°	101.9	107.6	125.7	151.4	161.8
150°	104.7	110.4	125.7	146.6	155.2
152.5°	108.5	113.3	124.7	141.9	149.5
155°	111.4	115.2	124.7	139.0	143.8
157.5°	114.2	118.1	124.7	136.1	139.9
160°	117.1	120.0	125.7	134.2	137.1
162.5°	120.0	121.9	125.7	132.3	134.2
165°	121.9	122.8	125.7	131.4	132.3
167.5°	123.8	124.7	125.7	130.4	130.4
170°	124.7	125.7	126.6	129.5	129.5
172.5°	126.6	126.6	126.6	128.5	128.5
175°	127.6	127.6	126.6	128.5	127.6
177.5°	127.6	127.6	126.6	128.5	127.6
180°	127.6	127.6	127.6	127.6	127.6

(END OF REPORT)