

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: P701251

Luminaire Tested: SQ4P-PW1-150U-050D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701251
REPORT IS A COMBINATION OF REPORTS P700151 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-150U-050D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 500 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

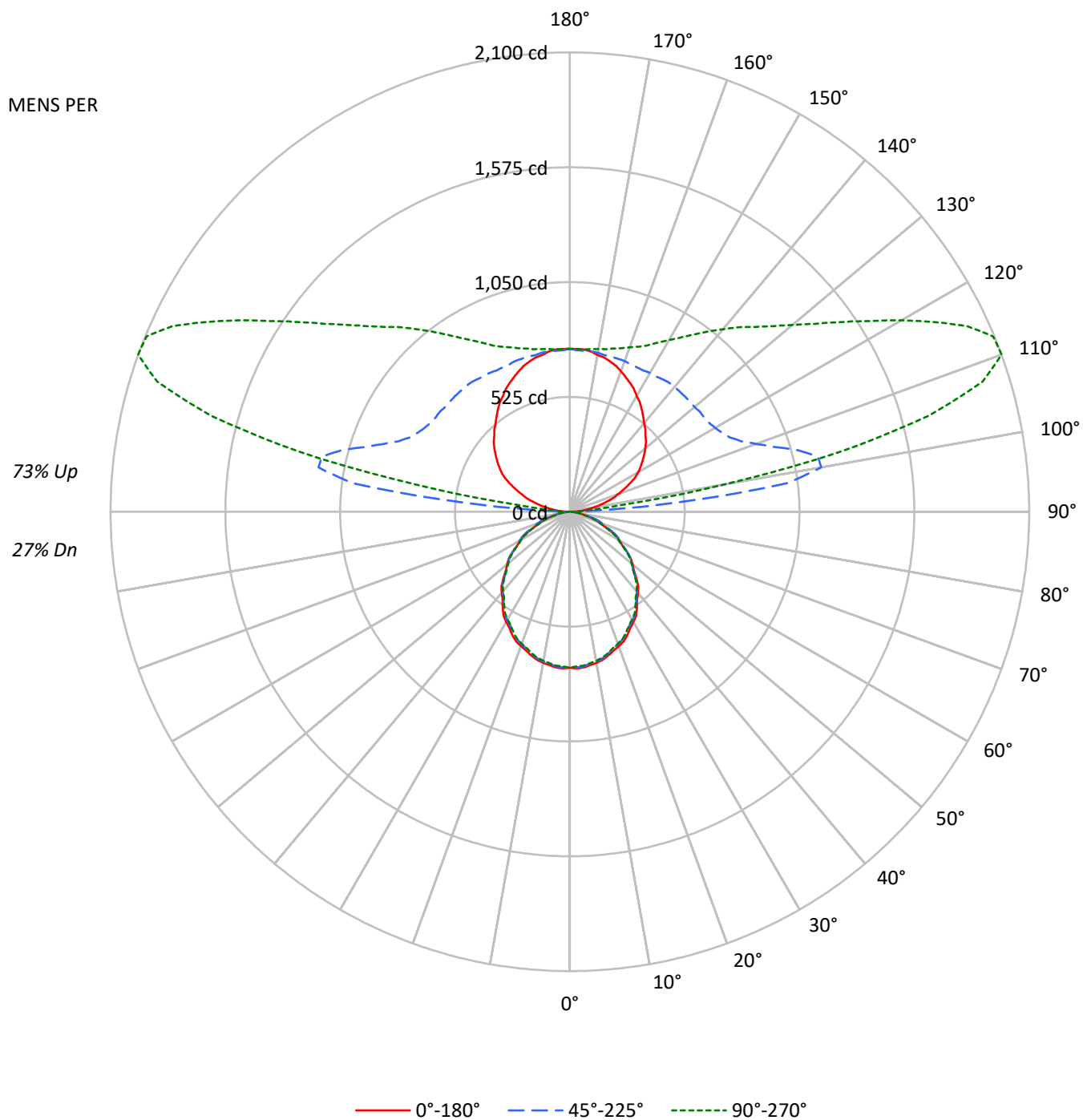
Lumens per Lamp: N/A
Luminaire Lumens: 6647.6 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 59.8
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: P701251

CATALOG NUMBER: SQ4P-PW1-150U-050D-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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35
1	93	89	85	82	83	79	76	73	62	60	58	46	45	43	31	31	30
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	28	26	25
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	24	23	21
4	70	60	52	47	63	54	47	42	42	38	34	32	29	26	22	20	18
5	64	53	46	40	57	48	41	36	38	33	29	28	25	23	20	18	16
6	59	48	40	34	53	43	36	31	34	29	26	26	22	20	18	16	14
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	15	13	11
9	47	35	28	23	42	32	26	21	25	21	18	19	16	14	14	12	10
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6576	6576	6576
5°	6619	6567	6538
10°	6566	6514	6478
15°	6497	6424	6401
20°	6419	6320	6308
25°	6330	6214	6195
30°	6196	6102	6062
35°	6020	5935	5898
40°	5832	5741	5718
45°	5605	5531	5506
50°	5372	5328	5291
55°	5122	5122	5041
60°	4811	4903	4729
65°	4399	4619	4292
70°	3879	4254	3777
75°	3315	3804	3223
80°	2572	3204	2603
85°	1662	2456	2191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5605 cd/sqm

TEST NUMBER: P701251

CATALOG NUMBER: SQ4P-PW1-150U-050D-B50-1D-UNV-

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	1.0
10°-20°	189.5	2.9
20°-30°	281.1	4.2
30°-40°	328.9	4.9
40°-50°	327.4	4.9
50°-60°	282.8	4.3
60°-70°	203.6	3.1
70°-80°	106.7	1.6
80°-90°	28.3	0.4
90°-100°	296.3	4.5
100°-110°	1031.0	15.5
110°-120°	998.8	15.0
120°-130°	783.5	11.8
130°-140°	620.1	9.3
140°-150°	478.6	7.2
150°-160°	343.1	5.2
160°-170°	209.8	3.2
170°-180°	71.0	1.1
0°-30°	537.7	8.1
0°-40°	866.6	13.0
0°-60°	1476.9	22.2
0°-90°	1815.4	27.3
90°-120°	2326.1	35.0
90°-150°	4208.3	63.3
90°-180°	4832.0	72.7
0°-180°	6647.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	715	707	709	707	706	68
15°	680	672	673	671	670	192
25°	622	611	610	607	608	286
35°	534	527	527	522	524	334
45°	430	426	424	423	422	331
55°	318	318	318	314	313	284
65°	202	208	212	203	197	200
75°	93	102	107	100	90	100
85°	16	21	23	22	21	21
90°	11	17	17	11	6	7
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	

TEST NUMBER: P701251

CATALOG NUMBER: SQ4P-PW1-150U-050D-B50-1D-UNV-

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	712.8	712.8	712.8	712.8	712.8
2.5°	716.9	711.0	712.8	711.3	707.8
5°	714.7	706.7	709.1	707.2	705.9
7.5°	707.4	700.1	701.7	699.7	699.1
10°	700.9	693.6	695.3	692.8	691.5
12.5°	693.4	685.5	687.3	684.6	683.9
15°	680.2	671.6	672.6	671.3	670.1
17.5°	664.8	656.1	656.2	654.3	653.9
20°	653.8	644.6	643.7	641.2	642.5
22.5°	641.8	632.0	631.2	627.7	629.4
25°	621.8	611.3	610.4	606.7	608.5
27.5°	598.6	588.4	588.4	583.1	585.0
30°	581.6	571.7	572.8	566.6	569.0
32.5°	563.5	554.6	555.1	548.9	551.5
35°	534.5	527.1	526.9	521.9	523.7
37.5°	504.8	498.3	497.2	494.4	494.9
40°	484.2	478.7	476.7	474.8	474.8
42.5°	462.6	457.6	455.5	454.1	453.7
45°	429.6	425.9	423.9	422.6	422.0
47.5°	396.9	393.5	391.8	390.9	390.2
50°	374.3	371.9	371.2	369.3	368.6
52.5°	351.8	350.2	349.6	347.2	346.5
55°	318.4	317.9	318.4	314.1	313.4
57.5°	283.7	284.8	286.7	280.8	279.3
60°	260.7	263.0	265.7	258.8	256.3
62.5°	237.0	241.0	244.6	236.6	233.1
65°	201.5	207.7	211.6	203.4	196.6
67.5°	167.5	175.1	179.7	170.8	163.2
70°	143.8	152.4	157.7	148.6	140.0
72.5°	123.2	132.8	137.1	128.5	120.0
75°	93.0	101.6	106.7	99.6	90.4
77.5°	66.0	74.1	78.4	72.2	64.5
80°	48.4	56.9	60.3	55.1	49.0
82.5°	34.3	41.5	43.7	40.6	36.4
85°	15.7	20.6	23.2	22.0	20.7
87.5°	4.0	7.4	9.5	9.5	10.1
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

TEST NUMBER: P701251

CATALOG NUMBER: SQ4P-PW1-150U-050D-B50-1D-UNV-

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)