

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: P701254

Luminaire Tested: SQ4P-PW1-150U-125D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701254
REPORT IS A COMBINATION OF REPORTS P700154 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-150U-125D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1250 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

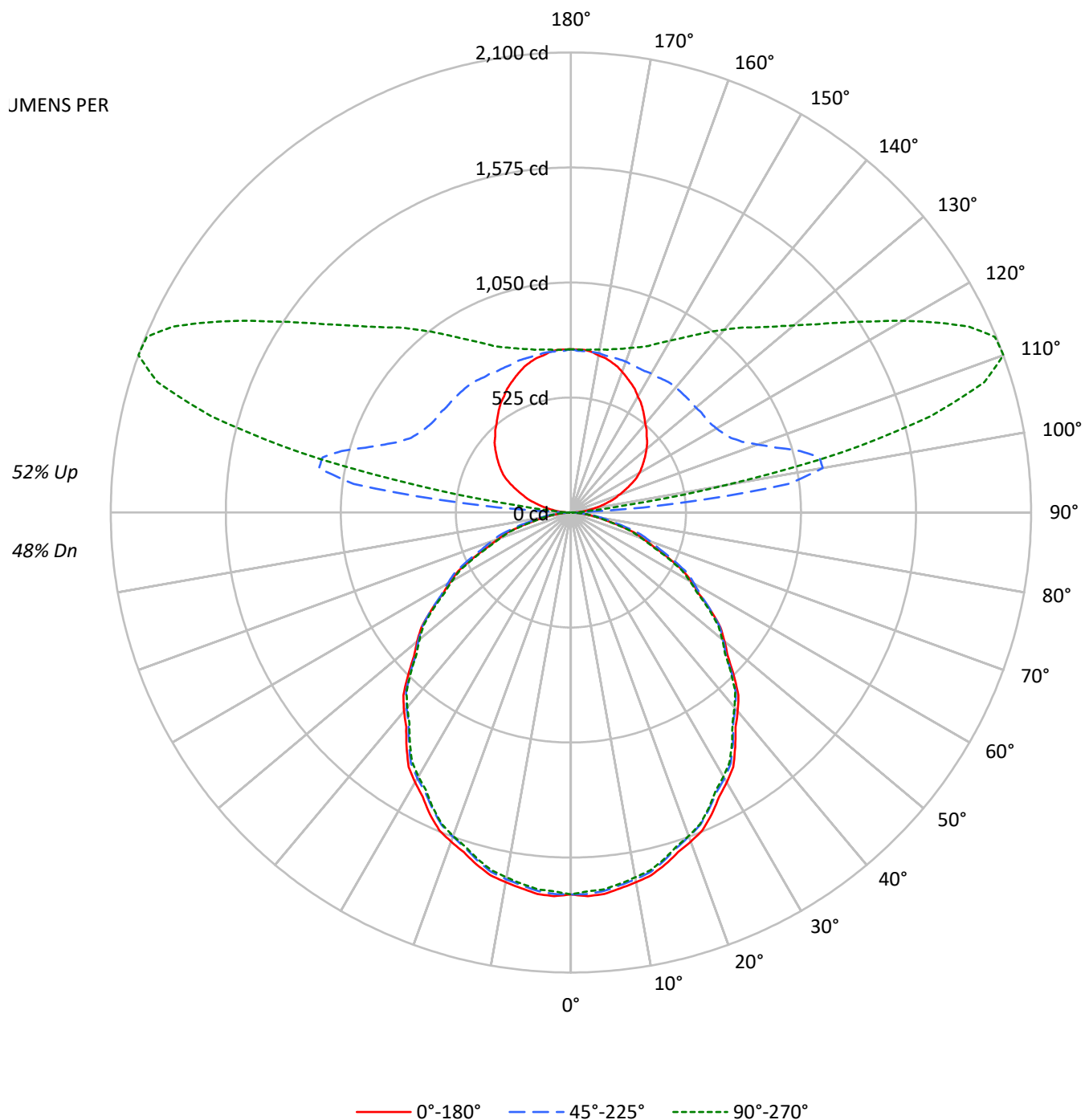
Lumens per Lamp: N/A
Luminaire Lumens: 9269.5 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88.8
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: P701254

CATALOG NUMBER: SQ4P-PW1-150U-125D-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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39
3	81	72	64	59	74	66	60	55	56	51	47	46	43	40	38	35	33
4	74	63	56	50	68	59	52	46	50	44	40	41	37	34	34	31	29
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25
6	63	51	43	37	57	47	40	35	40	34	30	34	29	26	27	24	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	17
9	50	38	30	25	46	35	29	24	30	25	21	26	21	18	21	18	16
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16084	16084	16084
5°	16189	16061	15990
10°	16059	15929	15843
15°	15889	15712	15654
20°	15699	15457	15429
25°	15480	15199	15150
30°	15152	14924	14825
35°	14722	14514	14427
40°	14264	14041	13987
45°	13708	13529	13467
50°	13142	13031	12941
55°	12526	12526	12329
60°	11765	11990	11564
65°	10763	11300	10496
70°	9485	10399	9242
75°	8106	9304	7882
80°	6285	7837	6376
85°	4065	6023	5356

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13708 cd/sqm

TEST NUMBER: P701254

CATALOG NUMBER: SQ4P-PW1-150U-125D-B50-1D-UNV-

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	1.8
10°-20°	463.5	5.0
20°-30°	687.5	7.4
30°-40°	804.4	8.7
40°-50°	800.9	8.6
50°-60°	691.6	7.5
60°-70°	497.8	5.4
70°-80°	261.0	2.8
80°-90°	66.5	0.7
90°-100°	296.3	3.2
100°-110°	1031.0	11.1
110°-120°	998.8	10.8
120°-130°	783.5	8.5
130°-140°	620.1	6.7
140°-150°	478.6	5.2
150°-160°	343.1	3.7
160°-170°	209.8	2.3
170°-180°	71.0	0.8
0°-30°	1315.1	14.2
0°-40°	2119.5	22.9
0°-60°	3611.9	39.0
0°-90°	4437.3	47.9
90°-120°	2326.1	25.1
90°-150°	4208.3	45.4
90°-180°	4832.0	52.1
0°-180°	9269.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1743	1743	1743	1743	1743	
5°	1748	1728	1734	1729	1726	166
15°	1664	1642	1645	1642	1639	469
25°	1521	1495	1493	1484	1488	699
35°	1307	1289	1289	1276	1281	817
45°	1051	1042	1037	1034	1032	811
55°	779	777	779	768	766	695
65°	493	508	518	497	481	489
75°	227	248	261	244	221	244
85°	38	50	57	54	51	51
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	

TEST NUMBER: P701254

CATALOG NUMBER: SQ4P-PW1-150U-125D-B50-1D-UNV-

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1753.2	1738.7	1743.3	1739.5	1731.1
5°	1748.0	1728.4	1734.2	1729.4	1726.5
7.5°	1730.2	1712.2	1716.2	1711.5	1709.6
10°	1714.1	1696.0	1700.3	1694.2	1691.1
12.5°	1695.8	1676.5	1680.7	1674.3	1672.8
15°	1663.5	1642.3	1645.0	1641.8	1638.9
17.5°	1626.0	1604.7	1605.0	1600.3	1599.4
20°	1598.9	1576.4	1574.3	1568.2	1571.4
22.5°	1569.5	1545.7	1543.6	1535.1	1539.3
25°	1520.6	1495.2	1493.0	1483.7	1488.2
27.5°	1464.1	1439.0	1439.0	1426.0	1430.8
30°	1422.3	1398.2	1400.9	1385.5	1391.6
32.5°	1378.1	1356.3	1357.7	1342.6	1348.7
35°	1307.1	1289.1	1288.6	1276.5	1280.9
37.5°	1234.6	1218.7	1216.0	1209.2	1210.2
40°	1184.3	1170.8	1165.8	1161.3	1161.3
42.5°	1131.3	1119.2	1114.2	1110.7	1109.6
45°	1050.6	1041.6	1036.9	1033.6	1032.1
47.5°	970.6	962.4	958.2	956.0	954.5
50°	915.6	909.5	907.9	903.1	901.6
52.5°	860.2	856.5	854.9	849.1	847.5
55°	778.7	777.3	778.7	768.1	766.5
57.5°	693.9	696.3	701.4	686.8	683.1
60°	637.6	643.4	649.8	632.8	626.7
62.5°	579.6	589.4	598.1	578.5	570.1
65°	493.0	508.1	517.6	497.2	480.8
67.5°	409.6	428.1	439.5	417.8	399.0
70°	351.6	372.8	385.5	363.5	342.6
72.5°	301.3	324.8	335.2	314.3	293.3
75°	227.4	248.4	261.0	243.6	221.1
77.5°	161.3	181.1	191.6	176.6	157.8
80°	118.3	139.3	147.5	134.8	120.0
82.5°	84.0	101.4	107.0	99.3	88.9
85°	38.4	50.3	56.9	53.8	50.6
87.5°	9.8	18.3	23.3	23.3	24.7
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: P701254

CATALOG NUMBER: SQ4P-PW1-150U-125D-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)