

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: P701252

Luminaire Tested: SQ4P-PW1-150U-075D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701252
REPORT IS A COMBINATION OF REPORTS P700152 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-150U-075D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 750 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

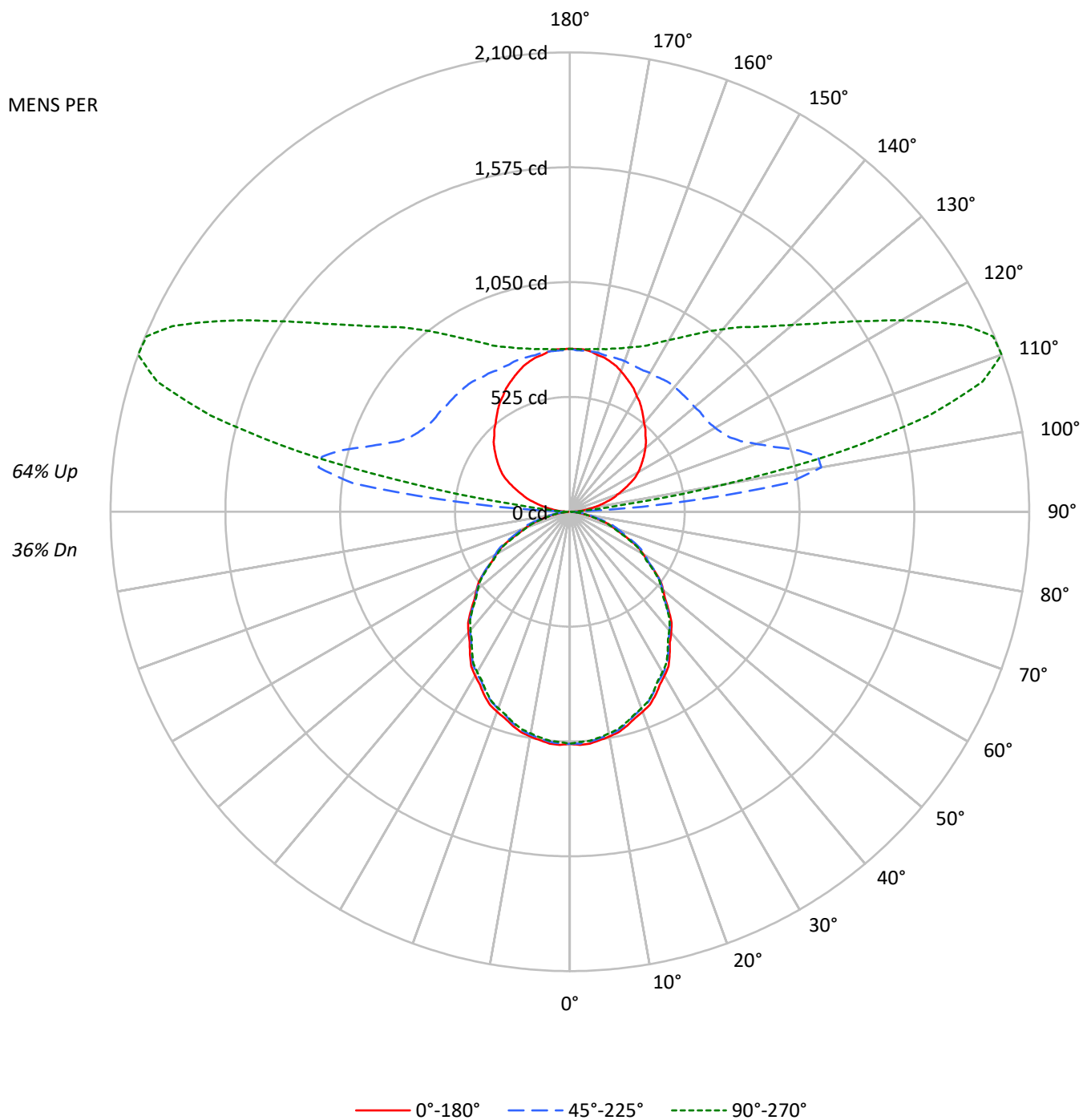
Lumens per Lamp: N/A
Luminaire Lumens: 7533.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 68.6
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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	38	37	37
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	34	32	31
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	24	23
5	66	55	47	41	59	50	43	38	41	36	32	32	28	26	24	22	20
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	17	15
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14
9	48	36	29	24	44	33	27	22	27	23	19	22	18	16	17	14	12
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9786	9786	9786
5°	9850	9773	9730
10°	9771	9694	9640
15°	9669	9561	9525
20°	9553	9405	9388
25°	9420	9249	9219
30°	9221	9081	9021
35°	8959	8831	8778
40°	8680	8544	8510
45°	8341	8232	8194
50°	7996	7930	7874
55°	7621	7621	7502
60°	7160	7296	7038
65°	6549	6875	6388
70°	5770	6328	5624
75°	4934	5664	4795
80°	3825	4771	3879
85°	2467	3673	3260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8341 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.3
10°-20°	282.0	3.7
20°-30°	418.3	5.6
30°-40°	489.5	6.5
40°-50°	487.3	6.5
50°-60°	420.8	5.6
60°-70°	302.9	4.0
70°-80°	158.8	2.1
80°-90°	41.2	0.5
90°-100°	296.3	3.9
100°-110°	1031.0	13.7
110°-120°	998.8	13.3
120°-130°	783.5	10.4
130°-140°	620.1	8.2
140°-150°	478.6	6.4
150°-160°	343.1	4.6
160°-170°	209.8	2.8
170°-180°	71.0	0.9
0°-30°	800.3	10.6
0°-40°	1289.7	17.1
0°-60°	2197.9	29.2
0°-90°	2700.8	35.9
90°-120°	2326.1	30.9
90°-150°	4208.3	55.9
90°-180°	4832.0	64.1
0°-180°	7533.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1064	1052	1055	1052	1051	101
15°	1012	999	1001	999	997	285
25°	925	910	908	903	906	425
35°	795	784	784	777	779	497
45°	639	634	631	629	628	493
55°	474	473	474	467	466	423
65°	300	309	315	303	293	297
75°	138	151	159	148	134	148
85°	23	31	35	33	31	31
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°	1060.7	1060.7	1060.7	1060.7	1060.7
2.5°	1066.8	1058.0	1060.7	1058.5	1053.3
5°	1063.6	1051.7	1055.2	1052.4	1050.6
7.5°	1052.8	1041.9	1044.3	1041.4	1040.3
10°	1043.0	1032.1	1034.7	1030.9	1029.0
12.5°	1031.9	1020.1	1022.8	1018.9	1017.9
15°	1012.3	999.3	1001.0	999.1	997.2
17.5°	989.3	976.5	976.7	973.7	973.3
20°	973.0	959.3	957.9	954.2	956.2
22.5°	955.1	940.6	939.3	934.1	936.7
25°	925.3	909.8	908.5	902.9	905.6
27.5°	890.9	875.7	875.7	867.8	870.6
30°	865.5	850.8	852.4	843.1	846.8
32.5°	838.5	825.4	826.2	817.0	820.6
35°	795.4	784.5	784.1	776.7	779.4
37.5°	751.2	741.6	740.0	735.8	736.4
40°	720.7	712.4	709.4	706.6	706.6
42.5°	688.4	681.0	677.9	675.8	675.2
45°	639.3	633.8	630.9	629.0	628.0
47.5°	590.6	585.6	583.0	581.8	580.8
50°	557.1	553.4	552.5	549.5	548.6
52.5°	523.4	521.2	520.2	516.7	515.7
55°	473.8	473.1	473.8	467.3	466.4
57.5°	422.2	423.7	426.8	417.9	415.7
60°	388.0	391.5	395.4	385.1	381.4
62.5°	352.6	358.6	364.0	352.1	346.8
65°	300.0	309.1	314.9	302.6	292.6
67.5°	249.2	260.5	267.4	254.2	242.8
70°	213.9	226.9	234.6	221.2	208.5
72.5°	183.4	197.6	203.9	191.3	178.5
75°	138.4	151.1	158.9	148.2	134.5
77.5°	98.2	110.2	116.6	107.5	96.1
80°	72.0	84.7	89.8	82.0	73.0
82.5°	51.0	61.7	65.1	60.5	54.2
85°	23.3	30.7	34.7	32.7	30.8
87.5°	6.0	11.1	14.2	14.2	14.9
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)