

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: P701248

Luminaire Tested: SQ4P-PW1-125U-075D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701248
REPORT IS A COMBINATION OF REPORTS P700124 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-125U-075D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 750 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

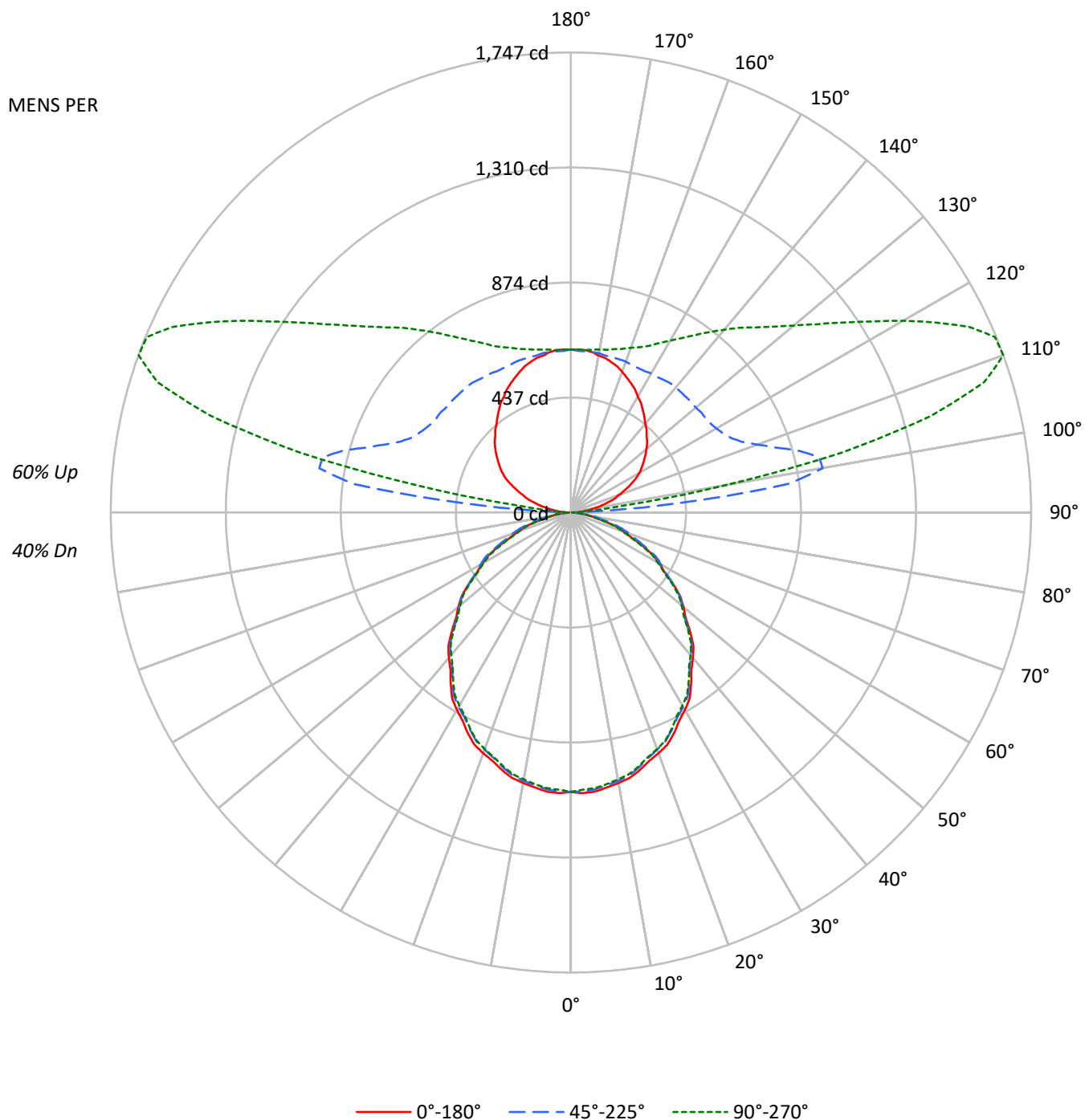
Lumens per Lamp: N/A
Luminaire Lumens: 6718.9 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 59.6
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	96	91	88	84	87	83	80	77	68	66	64	55	53	52	42	41	40
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34
3	80	70	63	57	72	64	58	53	53	48	45	42	39	37	33	31	29
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	55	47	41	60	51	44	39	42	37	33	34	30	27	26	24	22
6	61	50	42	36	56	45	38	33	38	32	29	31	27	24	24	21	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	40	33	28	48	37	31	26	31	26	22	25	21	19	20	17	15
9	49	37	30	25	44	34	27	23	29	23	20	23	19	17	18	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12

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	1.5
10°-20°	282.0	4.2
20°-30°	418.3	6.2
30°-40°	489.5	7.3
40°-50°	487.3	7.3
50°-60°	420.8	6.3
60°-70°	302.9	4.5
70°-80°	158.8	2.4
80°-90°	40.9	0.6
90°-100°	246.4	3.7
100°-110°	857.4	12.8
110°-120°	830.6	12.4
120°-130°	651.5	9.7
130°-140°	515.7	7.7
140°-150°	398.0	5.9
150°-160°	285.3	4.2
160°-170°	174.5	2.6
170°-180°	59.0	0.9
0°-30°	800.3	11.9
0°-40°	1289.7	19.2
0°-60°	2197.9	32.7
0°-90°	2700.5	40.2
90°-120°	1934.4	28.8
90°-150°	3499.5	52.1
90°-180°	4018.0	59.8
0°-180°	6718.9	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°	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	

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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°	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

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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)