

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: P701243

Luminaire Tested: SQ4P-PW1-100U-050D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701243
REPORT IS A COMBINATION OF REPORTS P700095 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-100U-050D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 500 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

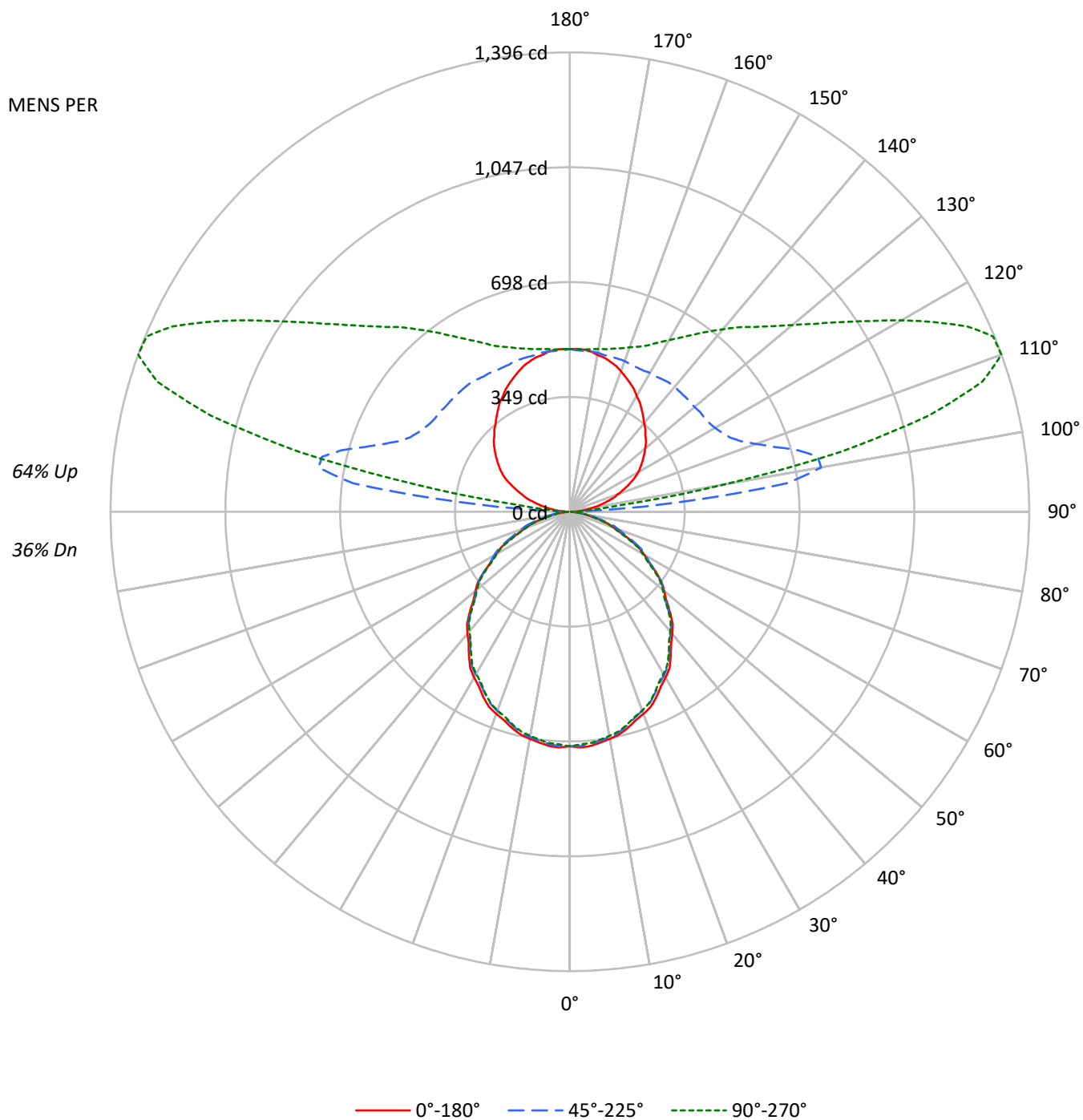
Lumens per Lamp: N/A
Luminaire Lumens: 5026.1 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.8
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

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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	76	76	76	59	59	59	43	43	43
1	95	91	87	83	86	82	79	76	66	64	62	52	50	49	38	38	37
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	32	31
3	79	70	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26
4	72	61	54	48	65	56	49	44	46	41	37	36	32	30	27	25	23
5	66	55	47	41	59	50	43	38	41	36	32	32	29	26	24	22	20
6	61	49	41	35	55	45	38	33	37	31	28	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	28	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°	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	1.3
10°-20°	189.5	3.8
20°-30°	281.1	5.6
30°-40°	328.9	6.5
40°-50°	327.4	6.5
50°-60°	282.8	5.6
60°-70°	203.6	4.0
70°-80°	106.7	2.1
80°-90°	27.7	0.6
90°-100°	196.9	3.9
100°-110°	685.2	13.6
110°-120°	663.7	13.2
120°-130°	520.7	10.4
130°-140°	412.1	8.2
140°-150°	318.0	6.3
150°-160°	228.0	4.5
160°-170°	139.4	2.8
170°-180°	47.2	0.9
0°-30°	537.7	10.7
0°-40°	866.6	17.2
0°-60°	1476.9	29.4
0°-90°	1814.8	36.1
90°-120°	1545.9	30.8
90°-150°	2796.7	55.6
90°-180°	3211.0	63.9
0°-180°	5026.1	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°	7	11	11	7	4	5
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	

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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°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0
107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8

(END OF REPORT)