

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:

Luminaire Tested: SQ4-PW1-100U-050D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

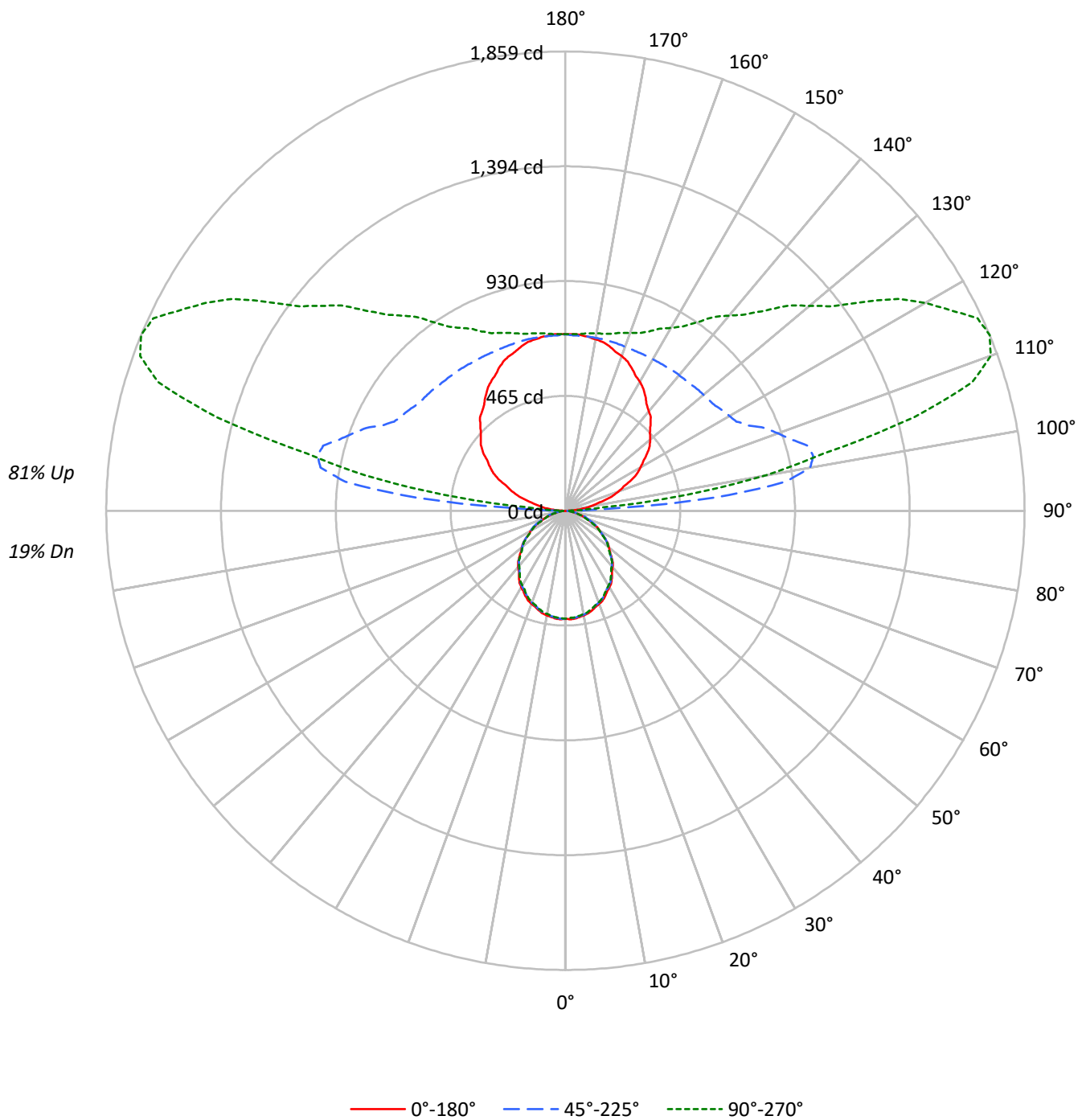
Lumens per Lamp: N/A
Luminaire Lumens: 5753.5 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
Input Voltage (V): 120
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	91	87	83	80	80	77	74	71	58	56	54	41	40	38	25	24	24
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20
3	75	67	60	54	66	59	53	49	45	41	38	32	29	27	19	18	17
4	69	59	51	46	61	52	46	41	40	35	32	28	25	23	17	16	15
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	13
6	58	47	39	33	51	41	35	30	32	27	24	23	20	17	14	12	11
7	53	42	34	29	47	37	31	26	29	24	21	20	17	15	13	11	10
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	31	24	20	24	19	16	17	14	12	11	9	8
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2691	2691	2691
5°	2709	2687	2675
10°	2687	2666	2651
15°	2659	2629	2619
20°	2627	2586	2582
25°	2590	2543	2535
30°	2536	2497	2481
35°	2464	2428	2414
40°	2386	2349	2340
45°	2294	2263	2254
50°	2199	2180	2165
55°	2096	2096	2063
60°	1968	2006	1935
65°	1800	1891	1757
70°	1588	1741	1547
75°	1357	1557	1319
80°	1052	1311	1066
85°	677	1009	896

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2294 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	0.7
10°-20°	116.3	2.0
20°-30°	172.5	3.0
30°-40°	201.9	3.5
40°-50°	201.0	3.5
50°-60°	173.6	3.0
60°-70°	124.9	2.2
70°-80°	65.5	1.1
80°-90°	17.7	0.3
90°-100°	334.3	5.8
100°-110°	923.0	16.0
110°-120°	951.9	16.5
120°-130°	765.0	13.3
130°-140°	601.2	10.4
140°-150°	461.1	8.0
150°-160°	331.4	5.8
160°-170°	202.6	3.5
170°-180°	68.3	1.2
0°-30°	330.1	5.7
0°-40°	532.0	9.2
0°-60°	906.5	15.8
0°-90°	1114.7	19.4
90°-120°	2209.3	38.4
90°-150°	4036.5	70.2
90°-180°	4639.0	80.6
0°-180°	5753.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	439	434	435	434	433	42
15°	418	412	413	412	411	118
25°	382	375	375	372	374	175
35°	328	324	323	320	322	205
45°	264	261	260	259	259	203
55°	196	195	196	193	192	174
65°	124	128	130	125	121	123
75°	57	62	66	61	56	61
85°	10	13	14	14	13	13
90°	2	4	9	10	11	4
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	437.5	437.5	437.5	437.5	437.5
2.5°	440.0	436.4	437.5	436.6	434.5
5°	438.7	433.8	435.2	434.1	433.3
7.5°	434.2	429.7	430.8	429.5	429.1
10°	430.2	425.7	426.8	425.2	424.4
12.5°	425.6	420.8	421.8	420.3	419.8
15°	417.5	412.2	412.9	412.1	411.3
17.5°	408.1	402.7	402.9	401.6	401.5
20°	401.3	395.7	395.1	393.6	394.4
22.5°	393.9	388.0	387.4	385.3	386.4
25°	381.6	375.2	374.7	372.4	373.6
27.5°	367.5	361.1	361.1	357.9	359.1
30°	357.0	350.9	351.6	347.8	349.3
32.5°	345.9	340.4	340.8	337.0	338.5
35°	328.1	323.5	323.4	320.4	321.5
37.5°	309.9	305.9	305.2	303.5	303.8
40°	297.2	293.8	292.6	291.4	291.4
42.5°	284.0	280.9	279.6	278.8	278.5
45°	263.7	261.4	260.2	259.4	259.1
47.5°	243.6	241.5	240.5	239.9	239.6
50°	229.8	228.3	227.8	226.7	226.3
52.5°	215.9	215.0	214.6	213.1	212.7
55°	195.5	195.1	195.5	192.7	192.4
57.5°	174.2	174.8	176.0	172.4	171.5
60°	160.0	161.5	163.1	158.8	157.3
62.5°	145.5	147.9	150.1	145.2	143.1
65°	123.7	127.5	129.9	124.8	120.7
67.5°	102.8	107.4	110.3	104.8	100.2
70°	88.3	93.6	96.8	91.2	86.0
72.5°	75.6	81.5	84.1	78.9	73.6
75°	57.1	62.3	65.5	61.2	55.5
77.5°	40.5	45.5	48.1	44.3	39.6
80°	29.7	35.0	37.0	33.8	30.1
82.5°	21.0	25.4	26.8	24.9	22.4
85°	9.6	12.7	14.3	13.5	12.7
87.5°	2.9	5.5	7.7	7.9	8.5
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)