

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-WB-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-WB-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

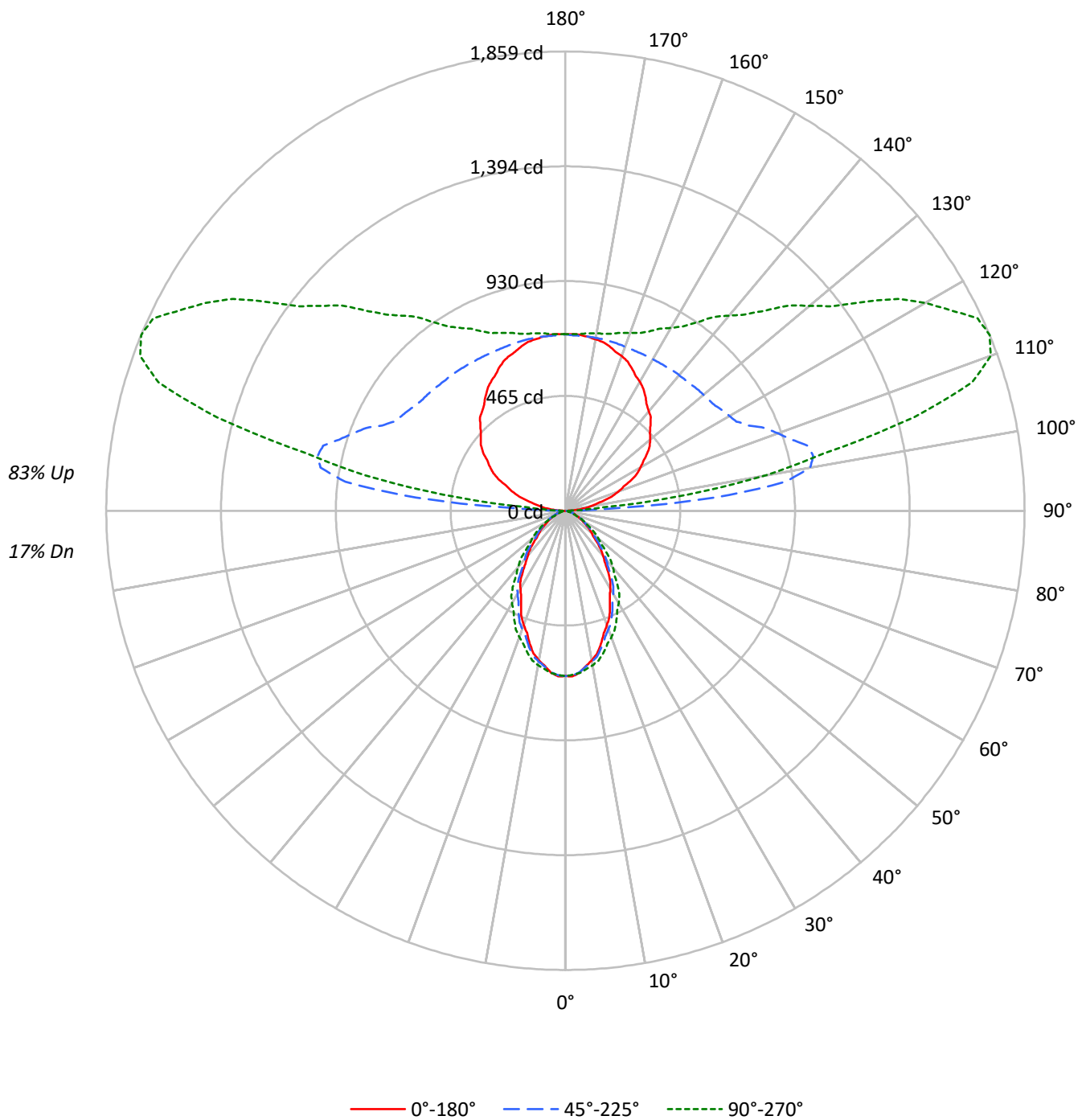
Lumens per Lamp: N/A
Luminaire Lumens: 5615.7 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26
1	91	87	83	80	80	77	74	71	58	56	54	40	39	38	24	23	23
2	83	76	71	66	73	67	63	59	51	48	45	35	34	32	21	21	20
3	76	67	61	55	67	60	54	50	45	41	38	32	30	28	19	18	17
4	70	60	53	47	61	53	47	42	40	36	33	28	26	24	17	16	15
5	64	53	46	40	56	47	41	36	36	32	29	26	23	21	16	15	14
6	59	48	40	35	52	42	36	32	33	28	25	23	21	18	15	13	12
7	54	43	36	31	48	38	32	28	29	25	22	21	18	16	13	12	11
8	50	39	32	27	44	35	29	24	27	23	20	19	17	15	12	11	10
9	47	35	29	24	41	32	26	22	25	20	17	18	15	13	11	10	9
10	44	32	26	21	39	29	23	19	23	18	16	16	14	12	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4117	4117	4117
5°	4066	4052	4075
10°	3842	3876	3966
15°	3546	3628	3791
20°	3220	3342	3563
25°	2888	3046	3319
30°	2582	2751	3067
35°	2259	2422	2768
40°	1901	2051	2396
45°	1568	1704	2001
50°	1310	1428	1667
55°	1112	1226	1377
60°	950	1063	1099
65°	757	894	710
70°	671	698	433
75°	620	566	266
80°	574	521	230
85°	515	480	183

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2001 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	1.1
10°-20°	159.7	2.8
20°-30°	206.9	3.7
30°-40°	202.6	3.6
40°-50°	155.1	2.8
50°-60°	103.3	1.8
60°-70°	56.4	1.0
70°-80°	23.5	0.4
80°-90°	8.1	0.1
90°-100°	334.3	6.0
100°-110°	923.0	16.4
110°-120°	951.9	17.0
120°-130°	765.0	13.6
130°-140°	601.2	10.7
140°-150°	461.1	8.2
150°-160°	331.4	5.9
160°-170°	202.6	3.6
170°-180°	68.3	1.2
0°-30°	428.0	7.6
0°-40°	630.5	11.2
0°-60°	888.9	15.8
0°-90°	976.9	17.4
90°-120°	2209.3	39.3
90°-150°	4036.5	71.9
90°-180°	4639.0	82.6
0°-180°	5615.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	658	652	656	658	660	61
15°	557	555	570	585	595	156
25°	426	427	449	468	489	196
35°	301	302	322	344	369	187
45°	180	184	196	211	230	141
55°	104	108	114	119	128	94
65°	52	56	61	54	49	54
75°	26	26	24	16	11	28
85°	7	7	7	4	3	8
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°	669.4	669.4	669.4	669.4	669.4
2.5°	671.0	665.1	666.6	666.5	664.7
5°	658.5	651.9	656.2	657.7	660.0
7.5°	634.1	629.1	636.8	642.6	647.2
10°	615.1	610.7	620.6	629.0	635.0
12.5°	593.0	589.3	601.6	612.8	620.7
15°	556.9	554.9	569.8	585.3	595.4
17.5°	518.3	517.3	534.5	552.5	565.4
20°	492.0	491.7	510.5	529.3	544.3
22.5°	465.4	466.1	485.8	505.4	522.4
25°	425.6	426.8	448.8	468.4	489.0
27.5°	388.8	389.3	412.1	432.7	454.8
30°	363.6	365.1	387.4	408.8	431.8
32.5°	338.5	340.2	362.0	384.1	407.6
35°	300.8	302.2	322.5	344.2	368.6
37.5°	261.9	263.8	281.9	302.4	326.4
40°	236.7	239.6	255.5	274.9	298.4
42.5°	212.5	216.1	230.9	249.2	270.5
45°	180.3	183.8	195.9	210.7	230.0
47.5°	152.6	156.6	165.9	178.7	195.1
50°	136.9	140.6	149.2	158.7	174.2
52.5°	123.0	126.7	134.4	141.7	154.9
55°	103.7	108.0	114.3	118.6	128.4
57.5°	87.8	92.0	96.9	98.9	104.8
60°	77.2	81.8	86.4	86.1	89.3
62.5°	67.6	71.5	76.0	72.9	73.1
65°	52.0	56.3	61.4	53.6	48.8
67.5°	42.0	42.9	48.2	37.4	31.6
70°	37.3	37.3	38.8	29.0	24.1
72.5°	32.8	32.8	31.5	23.6	18.4
75°	26.1	26.1	23.8	16.3	11.2
77.5°	20.1	19.9	18.2	12.2	8.1
80°	16.2	16.2	14.7	9.6	6.5
82.5°	12.6	12.6	11.4	7.5	4.8
85°	7.3	7.3	6.8	4.4	2.6
87.5°	3.0	3.5	4.2	3.5	3.5
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)