

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-150U-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

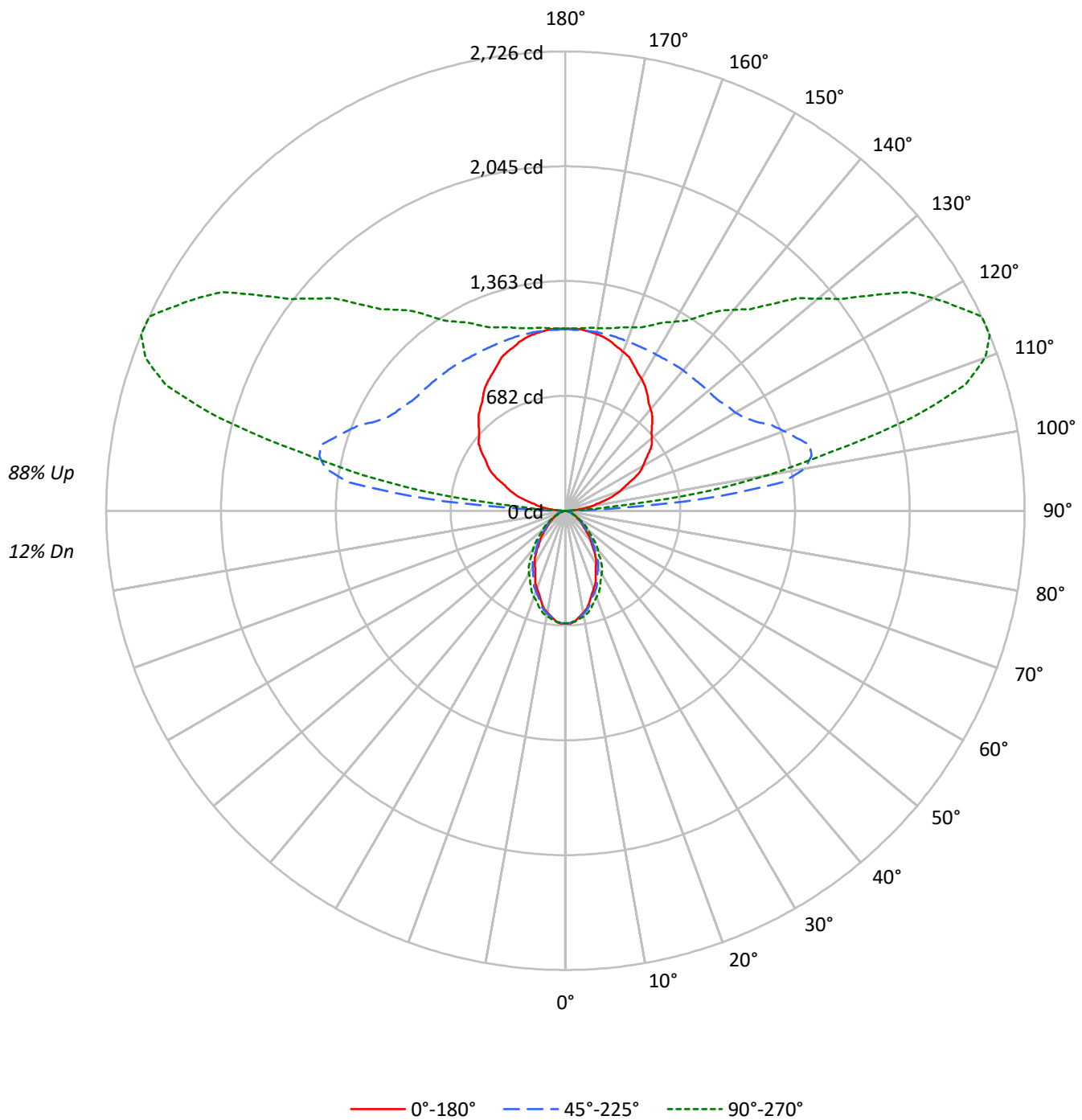
Lumens per Lamp: N/A
Luminaire Lumens: 7935.3 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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	98	98	98	98	86	86	86	86	62	62	62	41	41	41	22	22	22
1	90	86	82	79	78	75	72	69	55	53	51	36	35	34	19	19	19
2	82	75	69	65	71	66	61	57	48	45	43	32	31	29	17	17	16
3	75	66	59	54	65	58	53	48	43	39	36	29	27	25	16	15	14
4	68	59	51	46	59	51	45	41	38	34	31	26	23	22	14	13	12
5	63	52	45	39	55	46	40	35	34	30	27	23	21	19	13	12	11
6	58	47	39	34	50	41	35	30	31	26	23	21	18	16	12	11	10
7	53	42	35	29	46	37	31	26	28	23	20	19	16	14	11	10	9
8	49	38	31	26	43	34	27	23	25	21	18	17	15	13	10	9	8
9	46	34	28	23	40	30	25	21	23	19	16	16	13	12	9	8	7
10	43	31	25	20	37	28	22	18	21	17	14	15	12	10	9	7	6

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	0.8
10°-20°	159.7	2.0
20°-30°	206.9	2.6
30°-40°	202.6	2.6
40°-50°	155.1	2.0
50°-60°	103.3	1.3
60°-70°	56.4	0.7
70°-80°	23.5	0.3
80°-90°	8.9	0.1
90°-100°	501.5	6.3
100°-110°	1356.0	17.1
110°-120°	1425.6	18.0
120°-130°	1158.0	14.6
130°-140°	908.4	11.4
140°-150°	697.2	8.8
150°-160°	501.4	6.3
160°-170°	306.3	3.9
170°-180°	103.3	1.3
0°-30°	428.0	5.4
0°-40°	630.5	7.9
0°-60°	888.9	11.2
0°-90°	977.7	12.3
90°-120°	3283.2	41.4
90°-150°	6046.7	76.2
90°-180°	6958.0	87.7
0°-180°	7935.3	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	7	15	16	15	6
95°	78	273	834	432	257	81
105°	252	390	1504	2219	2128	265
115°	444	543	1248	2415	2726	438
125°	608	696	1124	1898	2229	542
135°	728	815	1094	1532	1734	563
145°	847	910	1079	1311	1411	530
155°	956	994	1070	1176	1215	441
165°	1041	1051	1074	1116	1122	293
175°	1080	1079	1076	1090	1087	103
180°	1079	1079	1079	1079	1079	

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-150U-050D-927-1D-UNV-STD-W-6

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	4.0	5.4	4.7	4.2
90°	2.3	6.9	15.1	16.2	15.1
92.5°	33.0	120.2	237.2	103.0	74.6
95°	77.8	273.2	834.0	431.6	256.7
97.5°	125.0	313.3	1300.1	1075.9	790.1
100°	160.3	329.5	1445.1	1507.0	1218.5
102.5°	192.8	352.1	1496.2	1833.9	1618.1
105°	252.1	389.5	1504.3	2219.0	2128.1
107.5°	306.9	432.3	1438.6	2459.1	2489.4
110°	349.6	463.2	1380.0	2523.6	2652.0

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-150U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	387.7	494.1	1326.1	2510.7	2726.3
115°	443.7	542.6	1247.6	2415.1	2726.3
117.5°	498.6	591.2	1195.8	2269.0	2621.8
120°	532.0	622.9	1165.1	2164.2	2524.2
122.5°	563.6	652.7	1146.5	2051.8	2414.5
125°	607.5	696.1	1124.4	1897.5	2229.1
127.5°	648.0	735.0	1111.4	1771.6	2063.3
130°	670.3	760.0	1105.9	1693.8	1957.3
132.5°	693.5	782.3	1100.3	1623.7	1866.3
135°	728.3	814.7	1094.2	1532.1	1734.3
137.5°	763.4	845.0	1089.1	1457.9	1622.6
140°	787.6	863.7	1087.3	1410.1	1556.6
142.5°	810.8	882.4	1083.6	1366.9	1495.2
145°	846.8	910.4	1079.1	1311.4	1411.4
147.5°	879.6	935.9	1074.0	1261.2	1338.0
150°	903.7	953.7	1072.2	1233.9	1295.2
152.5°	926.0	969.7	1071.2	1208.5	1259.0
155°	956.0	993.5	1069.9	1176.4	1215.1
157.5°	987.1	1013.3	1070.1	1154.1	1179.5
160°	1004.8	1026.4	1071.0	1140.0	1158.1
162.5°	1018.7	1036.7	1071.9	1128.7	1142.3
165°	1040.8	1051.0	1074.5	1116.4	1122.1
167.5°	1055.9	1063.0	1074.7	1105.9	1108.7
170°	1065.2	1068.6	1075.7	1101.2	1101.2
172.5°	1072.6	1073.3	1075.7	1095.6	1094.7
175°	1080.3	1079.2	1075.7	1089.5	1087.3
177.5°	1082.9	1080.1	1075.4	1084.7	1081.9
180°	1079.1	1079.1	1079.1	1079.1	1079.1

(END OF REPORT)