

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-100D-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-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

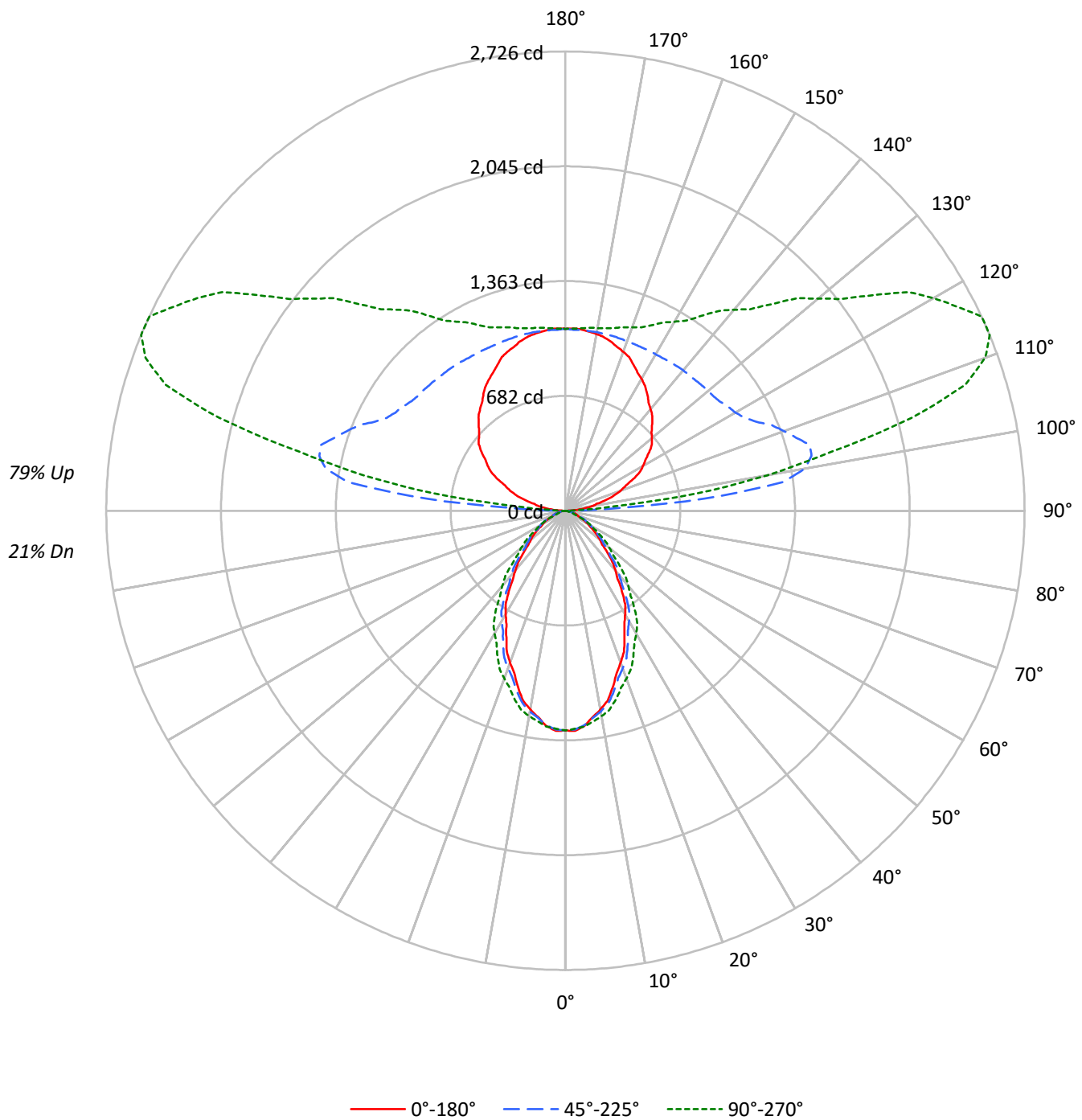
Lumens per Lamp: N/A
Luminaire Lumens: 8860.9 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 112.7
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	89	89	89	89	67	67	67	48	48	48	30	30	30
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26
2	84	77	72	67	74	69	64	60	53	50	47	38	36	35	24	24	23
3	77	68	62	56	68	61	55	51	47	43	40	34	32	30	22	21	20
4	71	61	53	48	62	54	48	43	42	38	35	31	28	26	20	19	18
5	65	54	47	41	57	48	42	37	38	33	30	28	25	23	18	17	16
6	60	49	41	36	53	44	37	33	34	30	26	25	22	20	17	15	14
7	55	44	37	31	49	39	33	29	31	26	23	23	20	18	16	14	13
8	51	40	33	28	45	36	30	25	28	24	21	21	18	16	14	13	11
9	48	36	29	25	42	33	27	23	26	22	19	19	17	14	13	12	10
10	44	33	27	22	40	30	24	20	24	20	17	18	15	13	12	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8024	8024	8024
5°	7924	7896	7942
10°	7487	7555	7730
15°	6911	7071	7389
20°	6276	6512	6943
25°	5630	5936	6468
30°	5033	5362	5977
35°	4402	4719	5394
40°	3705	3999	4670
45°	3058	3321	3899
50°	2553	2783	3249
55°	2167	2388	2683
60°	1851	2070	2140
65°	1474	1741	1383
70°	1307	1360	843
75°	1210	1103	518
80°	1116	1013	446
85°	1009	932	367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3899 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	1.4
10°-20°	311.2	3.5
20°-30°	403.2	4.5
30°-40°	394.8	4.5
40°-50°	302.2	3.4
50°-60°	201.4	2.3
60°-70°	109.9	1.2
70°-80°	45.8	0.5
80°-90°	15.2	0.2
90°-100°	501.5	5.7
100°-110°	1356.0	15.3
110°-120°	1425.6	16.1
120°-130°	1158.0	13.1
130°-140°	908.4	10.3
140°-150°	697.2	7.9
150°-160°	501.4	5.7
160°-170°	306.3	3.5
170°-180°	103.3	1.2
0°-30°	834.1	9.4
0°-40°	1228.8	13.9
0°-60°	1732.4	19.6
0°-90°	1903.3	21.5
90°-120°	3283.2	37.1
90°-150°	6046.7	68.2
90°-180°	6958.0	78.5
0°-180°	8860.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1283	1270	1279	1282	1286	119
15°	1085	1081	1110	1141	1160	303
25°	830	832	875	913	953	381
35°	586	589	628	671	718	364
45°	352	358	382	411	448	274
55°	202	210	223	231	250	183
65°	101	110	120	104	95	105
75°	51	51	46	32	22	54
85°	14	14	13	8	5	16
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:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.6	1304.6	1304.6	1304.6	1304.6
2.5°	1307.8	1296.1	1299.1	1299.0	1295.4
5°	1283.4	1270.5	1278.8	1281.8	1286.3
7.5°	1235.8	1226.0	1241.1	1252.3	1261.4
10°	1198.7	1190.3	1209.6	1225.8	1237.6
12.5°	1155.6	1148.6	1172.5	1194.3	1209.7
15°	1085.3	1081.4	1110.5	1140.7	1160.3
17.5°	1010.1	1008.2	1041.6	1076.9	1101.9
20°	958.8	958.3	994.9	1031.6	1060.7
22.5°	907.1	908.3	946.8	985.0	1018.1
25°	829.5	831.7	874.7	912.8	953.1
27.5°	757.7	758.7	803.1	843.4	886.4
30°	708.7	711.5	755.0	796.7	841.5
32.5°	659.7	662.9	705.6	748.6	794.3
35°	586.2	589.0	628.5	670.8	718.4
37.5°	510.4	514.2	549.3	589.3	636.1
40°	461.4	467.0	498.0	535.7	581.6
42.5°	414.2	421.2	449.9	485.7	527.1
45°	351.5	358.2	381.8	410.7	448.2
47.5°	297.4	305.2	323.3	348.2	380.2
50°	266.8	274.0	290.8	309.2	339.5
52.5°	239.7	247.0	261.9	276.2	301.9
55°	202.1	210.5	222.7	231.1	250.2
57.5°	171.2	179.2	188.9	192.7	204.2
60°	150.5	159.5	168.3	167.9	174.0
62.5°	131.8	139.4	148.1	142.1	142.4
65°	101.3	109.7	119.6	104.5	95.0
67.5°	81.9	83.6	93.9	72.9	61.6
70°	72.7	72.7	75.6	56.5	46.9
72.5°	64.0	64.0	61.4	45.9	35.9
75°	50.9	50.9	46.4	31.8	21.8
77.5°	39.3	38.8	35.5	23.7	15.8
80°	31.5	31.5	28.6	18.8	12.6
82.5°	24.6	24.6	22.2	14.6	9.4
85°	14.3	14.3	13.2	8.5	5.2
87.5°	5.5	6.4	7.6	6.0	5.3
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:

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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)