

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-F-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, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

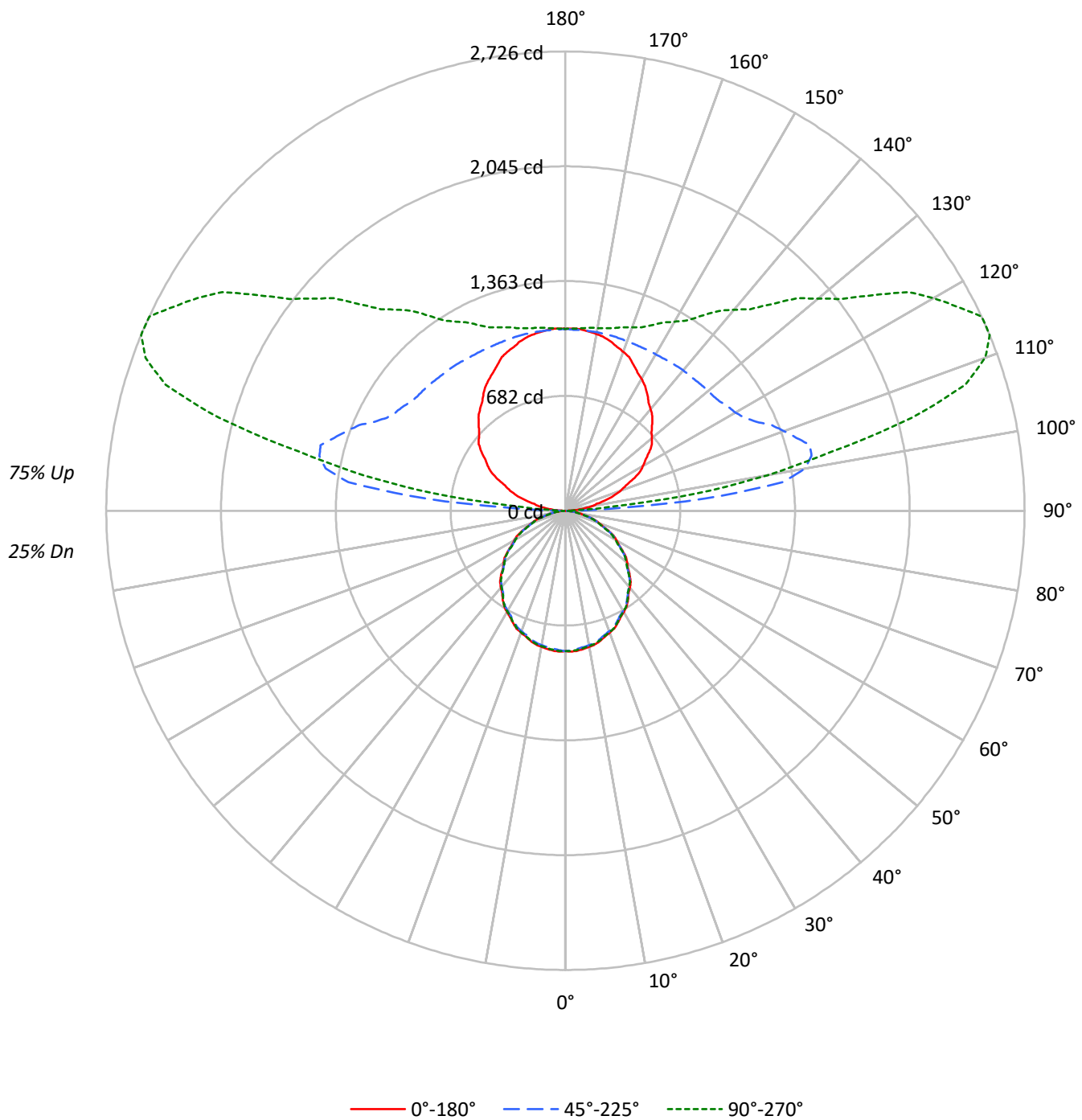
Lumens per Lamp: N/A
Luminaire Lumens: 9234.1 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	78	75	72	61	58	57	44	43	42	29	28	28
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23
3	76	67	60	55	68	60	54	49	47	43	39	34	31	29	22	21	20
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	57	47	41	36	37	32	28	27	24	21	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	14	12	10
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9
10	43	32	25	20	38	29	22	18	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5129	5129	5129
5°	5152	5081	5120
10°	5125	5061	5100
15°	5094	5025	5066
20°	5042	4982	5023
25°	4987	4928	4967
30°	4926	4874	4898
35°	4864	4804	4830
40°	4783	4728	4732
45°	4699	4635	4620
50°	4578	4523	4513
55°	4443	4393	4363
60°	4308	4231	4217
65°	4098	4007	3973
70°	3807	3715	3644
75°	3401	3291	3223
80°	2798	2696	2575
85°	1658	1821	1856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4699 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	0.9
10°-20°	224.1	2.4
20°-30°	336.5	3.6
30°-40°	401.6	4.3
40°-50°	411.7	4.5
50°-60°	366.6	4.0
60°-70°	273.3	3.0
70°-80°	148.0	1.6
80°-90°	35.9	0.4
90°-100°	501.5	5.4
100°-110°	1356.0	14.7
110°-120°	1425.6	15.4
120°-130°	1158.0	12.5
130°-140°	908.4	9.8
140°-150°	697.2	7.6
150°-160°	501.4	5.4
160°-170°	306.3	3.3
170°-180°	103.3	1.1
0°-30°	639.3	6.9
0°-40°	1041.0	11.3
0°-60°	1819.3	19.7
0°-90°	2276.4	24.7
90°-120°	3283.2	35.6
90°-150°	6046.7	65.5
90°-180°	6958.0	75.4
0°-180°	9234.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	834	833	823	830	829	79
15°	800	797	789	796	796	225
25°	735	733	726	730	732	339
35°	648	645	640	641	643	404
45°	540	537	533	530	531	416
55°	414	415	410	406	407	371
65°	282	280	275	272	273	278
75°	143	141	138	136	136	152
85°	24	26	26	26	26	33
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°	833.8	833.8	833.8	833.8	833.8
2.5°	837.0	835.2	827.8	833.8	832.9
5°	834.4	832.7	822.9	830.3	829.2
7.5°	826.6	824.9	816.3	823.1	822.1
10°	820.6	819.0	810.3	817.2	816.6
12.5°	812.9	811.2	802.6	809.4	808.9
15°	800.0	797.2	789.2	795.5	795.5
17.5°	783.1	781.0	773.5	778.8	778.9
20°	770.3	768.6	761.1	766.9	767.4
22.5°	757.5	755.8	747.4	752.7	753.7
25°	734.8	733.1	726.2	730.3	731.9
27.5°	711.4	709.0	702.2	705.8	707.0
30°	693.6	692.5	686.2	687.9	689.6
32.5°	674.8	673.7	668.3	669.2	672.2
35°	647.8	645.0	639.8	641.0	643.2
37.5°	615.9	614.5	609.5	608.8	611.0
40°	595.7	593.5	588.9	587.8	589.4
42.5°	573.8	571.5	566.0	564.9	567.0
45°	540.2	537.4	532.8	529.9	531.1
47.5°	502.7	502.7	497.9	494.6	496.3
50°	478.4	478.4	472.7	469.9	471.6
52.5°	453.2	453.7	447.5	446.0	445.5
55°	414.3	414.9	409.7	405.8	406.9
57.5°	376.8	375.6	369.6	367.0	367.5
60°	350.2	348.6	343.9	340.0	342.8
62.5°	323.2	322.4	317.8	313.4	313.0
65°	281.6	280.4	275.3	272.4	273.0
67.5°	240.1	238.8	234.1	230.0	231.4
70°	211.7	211.7	206.6	204.3	202.6
72.5°	185.6	183.4	179.6	176.3	175.1
75°	143.1	141.4	138.5	135.6	135.6
77.5°	104.2	102.7	100.8	98.9	98.3
80°	79.0	78.4	76.1	75.5	72.7
82.5°	55.6	55.5	54.1	52.6	52.5
85°	23.5	25.7	25.8	26.3	26.3
87.5°	4.6	8.2	9.4	8.7	8.5
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)