

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-PR1-150U-075D-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-PR1-150U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

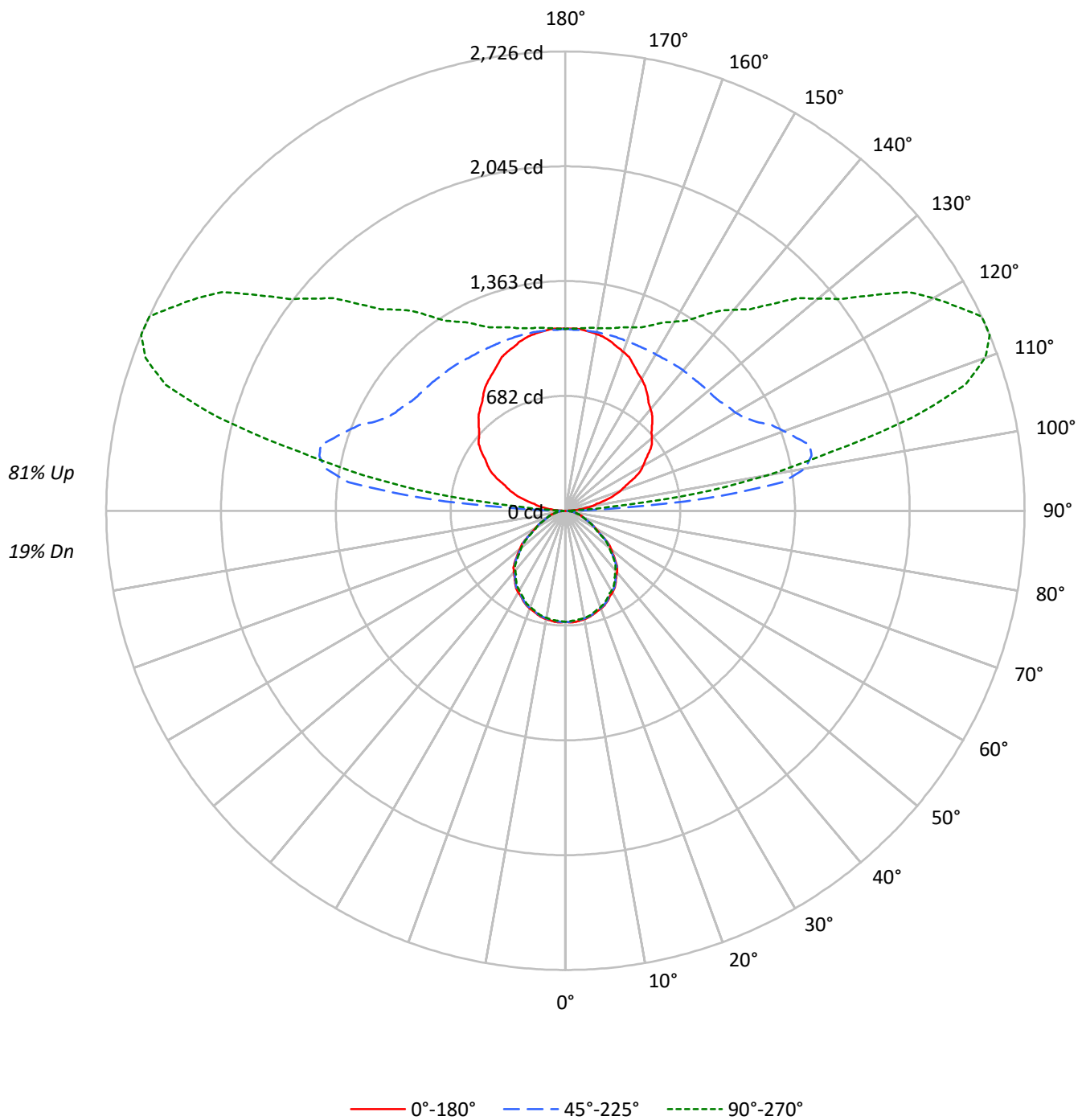
Lumens per Lamp: N/A
Luminaire Lumens: 8609.3 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 97.8
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	76	67	60	54	66	59	53	49	45	41	38	32	29	27	19	18	17
4	69	59	52	46	61	52	46	41	40	36	32	28	26	23	17	16	15
5	63	52	45	39	56	47	40	35	36	31	28	25	22	20	16	14	13
6	58	47	39	34	51	42	35	30	32	27	24	23	20	18	14	13	11
7	54	42	35	29	47	37	31	26	29	24	21	21	18	15	13	11	10
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	10	9
9	46	34	27	23	41	31	25	21	24	19	16	17	14	12	11	9	8
10	43	31	25	20	38	28	22	18	22	17	15	16	13	11	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4058	4058	4058
5°	4095	4063	4042
10°	4082	4053	4032
15°	4064	4038	4017
20°	4043	4017	3988
25°	4015	3988	3942
30°	3972	3943	3887
35°	3913	3879	3823
40°	3824	3783	3714
45°	3668	3604	3530
50°	3393	3312	3247
55°	2962	2894	2833
60°	2496	2475	2426
65°	2158	2167	2151
70°	1982	1993	1993
75°	1904	1904	1918
80°	1792	1810	1792
85°	1447	1602	1602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3668 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	0.7
10°-20°	178.5	2.1
20°-30°	269.2	3.1
30°-40°	320.8	3.7
40°-50°	316.3	3.7
50°-60°	241.7	2.8
60°-70°	149.6	1.7
70°-80°	85.0	1.0
80°-90°	28.1	0.3
90°-100°	501.5	5.8
100°-110°	1356.0	15.8
110°-120°	1425.6	16.6
120°-130°	1158.0	13.5
130°-140°	908.4	10.6
140°-150°	697.2	8.1
150°-160°	501.4	5.8
160°-170°	306.3	3.6
170°-180°	103.3	1.2
0°-30°	510.1	5.9
0°-40°	831.0	9.7
0°-60°	1389.0	16.1
0°-90°	1651.6	19.2
90°-120°	3283.2	38.1
90°-150°	6046.7	70.2
90°-180°	6958.0	80.8
0°-180°	8609.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	663	656	658	656	655	63
15°	638	632	634	632	631	180
25°	592	584	588	581	581	272
35°	521	515	517	510	509	325
45°	422	416	414	407	406	323
55°	276	272	270	265	264	247
65°	148	147	149	148	148	150
75°	80	80	80	81	81	85
85°	20	22	23	23	23	24
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°	659.8	659.8	659.8	659.8	659.8
2.5°	663.9	658.1	659.8	658.3	655.2
5°	663.2	656.0	658.1	655.8	654.7
7.5°	658.1	651.0	653.1	650.8	650.1
10°	653.5	646.9	649.0	646.7	645.6
12.5°	648.5	641.4	644.0	641.2	640.1
15°	638.2	631.5	634.2	631.9	630.8
17.5°	626.8	619.7	622.4	619.7	618.3
20°	617.7	611.1	613.7	609.7	609.2
22.5°	607.7	601.0	603.7	598.4	598.3
25°	591.6	584.4	587.6	581.3	580.8
27.5°	572.4	565.7	568.4	562.0	561.3
30°	559.2	552.5	555.2	548.4	547.3
32.5°	544.2	538.0	540.2	533.4	532.7
35°	521.1	515.0	516.6	509.7	509.2
37.5°	494.9	489.3	490.2	482.7	482.1
40°	476.2	470.7	471.1	463.1	462.6
42.5°	455.8	450.2	449.7	441.8	441.2
45°	421.7	416.1	414.3	406.9	405.8
47.5°	382.8	377.2	373.8	367.8	367.0
50°	354.6	349.0	346.1	340.9	339.3
52.5°	324.1	318.6	316.1	311.4	309.7
55°	276.2	271.7	269.9	265.4	264.2
57.5°	230.6	227.6	227.1	222.6	222.2
60°	202.9	201.2	201.2	197.2	197.2
62.5°	179.2	178.0	178.9	176.3	175.8
65°	148.3	147.2	148.9	147.8	147.8
67.5°	123.9	123.9	124.9	124.5	124.5
70°	110.2	110.2	110.8	110.8	110.8
72.5°	98.0	97.5	99.0	99.0	98.5
75°	80.1	80.1	80.1	80.7	80.7
77.5°	62.4	62.5	63.0	62.8	62.4
80°	50.6	51.1	51.1	50.6	50.6
82.5°	38.8	39.3	39.3	39.2	38.8
85°	20.5	21.6	22.7	22.7	22.7
87.5°	6.4	9.1	12.1	12.3	11.7
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)