

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-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-PR1-150U-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

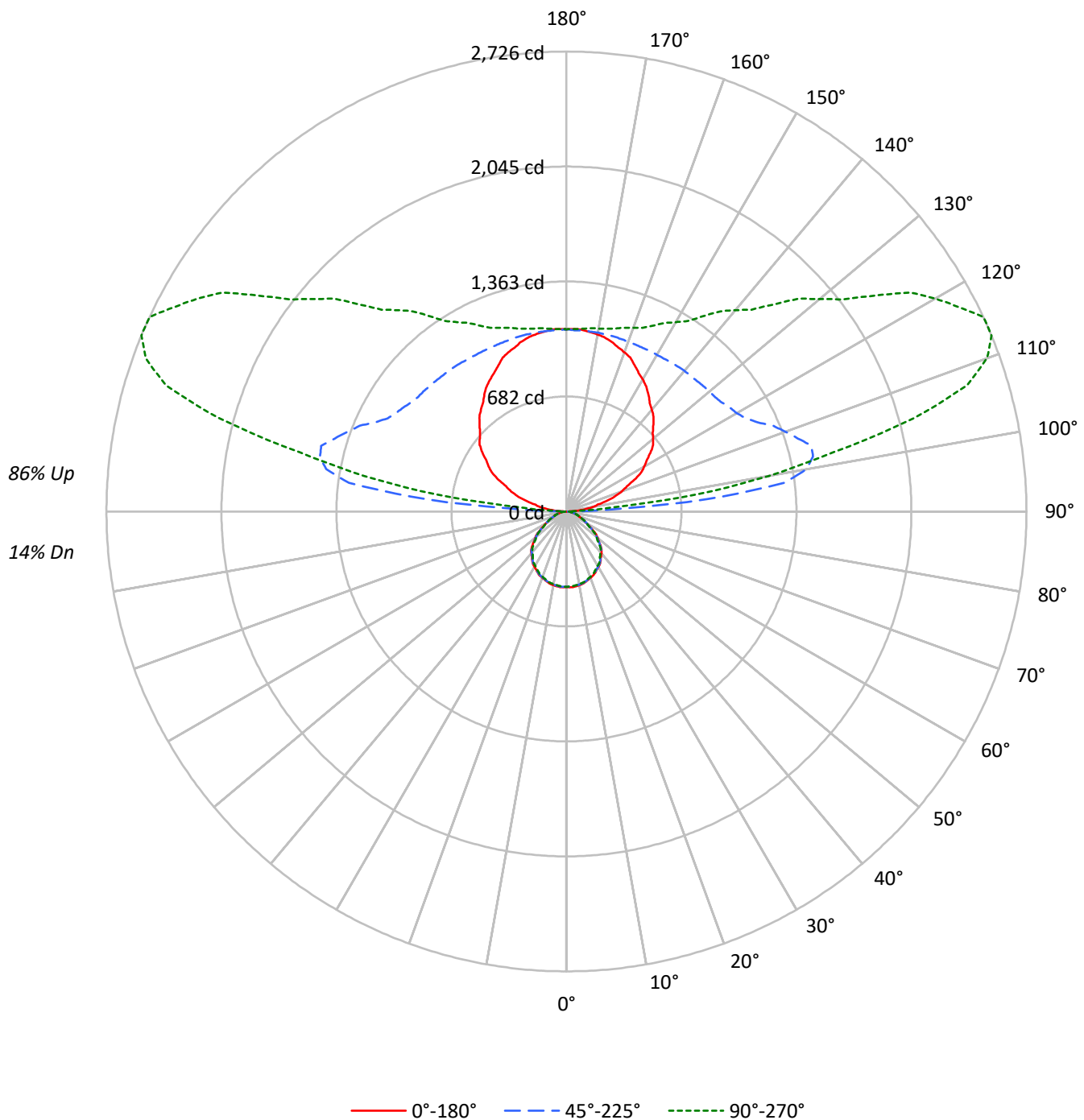
Lumens per Lamp: N/A
Luminaire Lumens: 8079.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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	99	99	99	99	86	86	86	86	63	63	63	42	42	42	23	23	23
1	90	86	82	79	78	75	72	69	55	53	52	37	36	35	20	20	19
2	82	75	69	64	71	66	61	57	48	45	43	33	31	29	18	17	16
3	75	66	59	54	65	58	52	48	43	39	36	29	27	25	16	15	14
4	68	58	51	45	59	51	45	40	38	34	31	26	23	21	14	13	12
5	62	51	44	38	54	45	39	34	34	29	26	23	20	18	13	12	11
6	57	46	38	33	50	41	34	29	30	26	23	21	18	16	12	10	9
7	53	41	34	29	46	36	30	26	27	23	20	19	16	14	11	9	8
8	49	37	30	25	43	33	27	22	25	20	17	17	14	12	10	8	7
9	45	34	27	22	39	30	24	20	22	18	15	15	13	11	9	8	7
10	42	31	24	19	37	27	21	18	21	16	14	14	12	10	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2753	2753	2753
5°	2778	2757	2743
10°	2769	2750	2736
15°	2757	2740	2725
20°	2743	2726	2705
25°	2724	2706	2674
30°	2695	2675	2637
35°	2655	2632	2594
40°	2594	2566	2520
45°	2489	2445	2395
50°	2302	2247	2203
55°	2010	1963	1923
60°	1693	1679	1646
65°	1464	1470	1458
70°	1345	1352	1352
75°	1293	1293	1302
80°	1215	1229	1215
85°	981	1087	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2489 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.3	0.5
10°-20°	121.1	1.5
20°-30°	182.7	2.3
30°-40°	217.7	2.7
40°-50°	214.6	2.7
50°-60°	164.0	2.0
60°-70°	101.5	1.3
70°-80°	57.7	0.7
80°-90°	19.8	0.2
90°-100°	501.5	6.2
100°-110°	1356.0	16.8
110°-120°	1425.6	17.6
120°-130°	1158.0	14.3
130°-140°	908.4	11.2
140°-150°	697.2	8.6
150°-160°	501.4	6.2
160°-170°	306.3	3.8
170°-180°	103.3	1.3
0°-30°	346.1	4.3
0°-40°	563.8	7.0
0°-60°	942.4	11.7
0°-90°	1121.3	13.9
90°-120°	3283.2	40.6
90°-150°	6046.7	74.8
90°-180°	6958.0	86.1
0°-180°	8079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	450	445	446	445	444	43
15°	433	428	430	429	428	122
25°	401	396	399	394	394	185
35°	354	349	350	346	346	221
45°	286	282	281	276	275	219
55°	187	184	183	180	179	168
65°	101	100	101	100	100	102
75°	54	54	54	55	55	57
85°	14	15	15	15	15	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	447.6	447.6	447.6	447.6	447.6
2.5°	450.4	446.5	447.6	446.7	444.6
5°	450.0	445.1	446.5	444.9	444.2
7.5°	446.5	441.7	443.1	441.5	441.1
10°	443.4	438.9	440.3	438.8	438.0
12.5°	440.0	435.2	436.9	435.1	434.3
15°	433.0	428.5	430.3	428.7	428.0
17.5°	425.3	420.5	422.3	420.5	419.5
20°	419.1	414.6	416.4	413.7	413.3
22.5°	412.3	407.8	409.6	406.0	405.9
25°	401.4	396.5	398.7	394.4	394.0
27.5°	388.3	383.8	385.6	381.3	380.9
30°	379.4	374.9	376.7	372.1	371.3
32.5°	369.2	365.0	366.5	361.9	361.4
35°	353.6	349.4	350.5	345.8	345.5
37.5°	335.8	332.0	332.6	327.5	327.1
40°	323.1	319.3	319.6	314.2	313.8
42.5°	309.2	305.5	305.1	299.7	299.4
45°	286.1	282.3	281.1	276.0	275.3
47.5°	259.7	255.9	253.6	249.5	249.0
50°	240.6	236.8	234.8	231.3	230.2
52.5°	219.9	216.2	214.5	211.3	210.1
55°	187.4	184.4	183.1	180.0	179.3
57.5°	156.5	154.4	154.1	151.1	150.8
60°	137.6	136.5	136.5	133.8	133.8
62.5°	121.6	120.8	121.4	119.6	119.3
65°	100.6	99.9	101.0	100.2	100.2
67.5°	84.1	84.1	84.7	84.4	84.4
70°	74.8	74.8	75.2	75.2	75.2
72.5°	66.5	66.2	67.2	67.2	66.9
75°	54.4	54.4	54.4	54.8	54.8
77.5°	42.3	42.4	42.7	42.6	42.3
80°	34.3	34.7	34.7	34.3	34.3
82.5°	26.3	26.7	26.7	26.6	26.3
85°	13.9	14.6	15.4	15.4	15.4
87.5°	4.5	6.6	9.2	9.4	8.9
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

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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)