

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-PW1-150U-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-PW1-150U-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

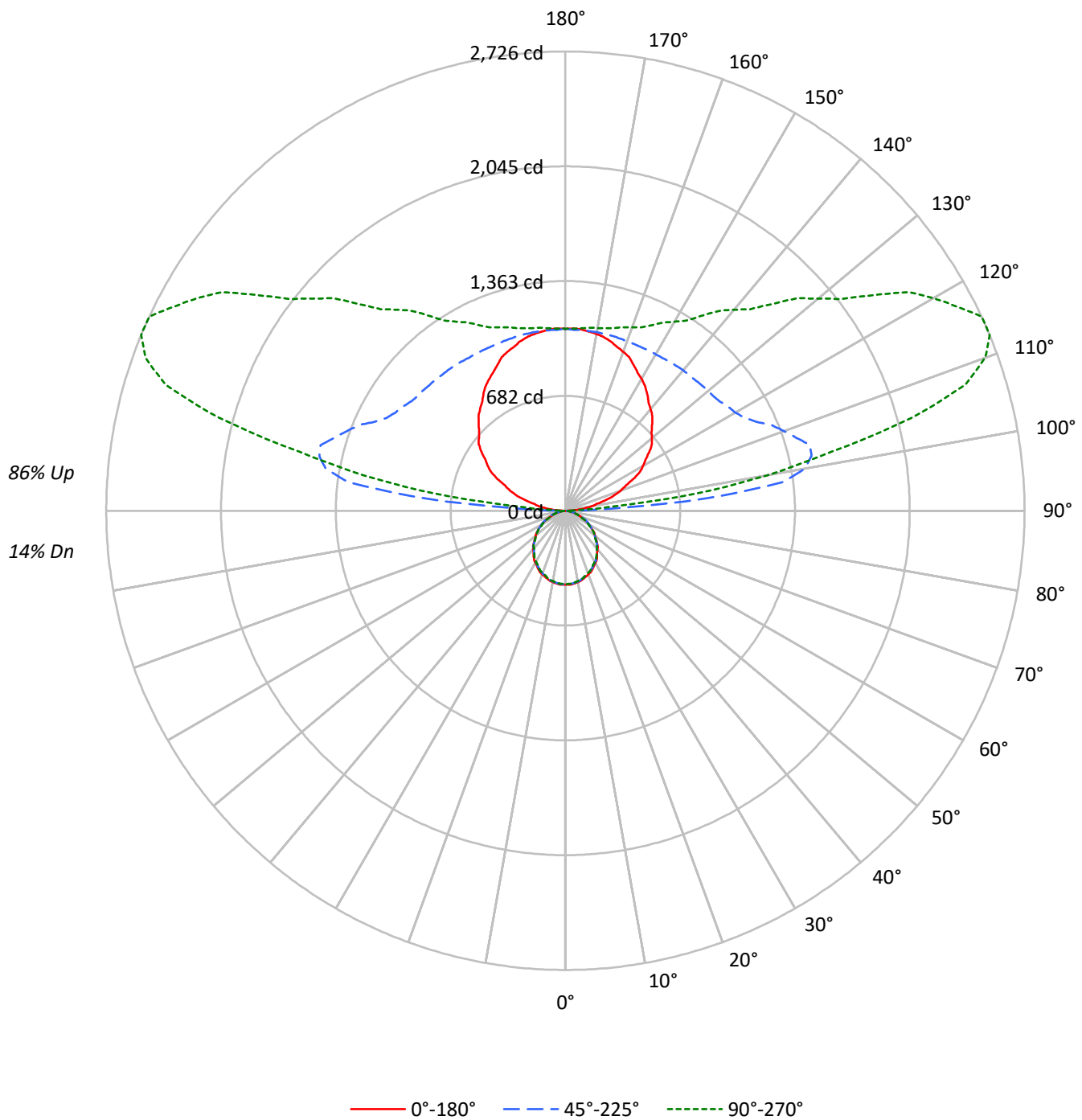
Lumens per Lamp: N/A
Luminaire Lumens: 8073.1 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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	32	31	29	18	17	16
3	74	66	59	53	65	58	52	47	43	39	36	29	26	25	16	15	14
4	68	58	50	45	59	51	45	40	38	34	30	25	23	21	14	13	12
5	62	51	44	38	54	45	39	34	34	29	26	23	20	18	13	11	10
6	57	46	38	33	50	40	34	29	30	26	22	20	18	16	11	10	9
7	53	41	34	28	46	36	30	25	27	23	19	18	16	14	10	9	8
8	49	37	30	25	42	33	27	22	24	20	17	17	14	12	9	8	7
9	45	34	27	22	39	30	24	20	22	18	15	15	13	11	9	7	6
10	42	31	24	19	37	27	21	17	20	16	13	14	11	10	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2691	2691	2691
5°	2709	2687	2675
10°	2687	2666	2651
15°	2659	2629	2619
20°	2627	2586	2582
25°	2590	2543	2535
30°	2536	2497	2481
35°	2464	2428	2414
40°	2386	2349	2340
45°	2294	2263	2254
50°	2199	2180	2165
55°	2096	2096	2063
60°	1968	2006	1935
65°	1800	1891	1757
70°	1588	1741	1547
75°	1357	1557	1319
80°	1052	1311	1066
85°	677	1009	896

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2294 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	0.5
10°-20°	116.3	1.4
20°-30°	172.5	2.1
30°-40°	201.9	2.5
40°-50°	201.0	2.5
50°-60°	173.6	2.2
60°-70°	124.9	1.5
70°-80°	65.5	0.8
80°-90°	18.5	0.2
90°-100°	501.5	6.2
100°-110°	1356.0	16.8
110°-120°	1425.6	17.7
120°-130°	1158.0	14.3
130°-140°	908.4	11.3
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°	330.1	4.1
0°-40°	532.0	6.6
0°-60°	906.5	11.2
0°-90°	1115.5	13.8
90°-120°	3283.2	40.7
90°-150°	6046.7	74.9
90°-180°	6958.0	86.2
0°-180°	8073.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	439	434	435	434	433	42
15°	418	412	413	412	411	118
25°	382	375	375	372	374	175
35°	328	324	323	320	322	205
45°	264	261	260	259	259	203
55°	196	195	196	193	192	174
65°	124	128	130	125	121	123
75°	57	62	66	61	56	61
85°	10	13	14	14	13	13
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°	437.5	437.5	437.5	437.5	437.5
2.5°	440.0	436.4	437.5	436.6	434.5
5°	438.7	433.8	435.2	434.1	433.3
7.5°	434.2	429.7	430.8	429.5	429.1
10°	430.2	425.7	426.8	425.2	424.4
12.5°	425.6	420.8	421.8	420.3	419.8
15°	417.5	412.2	412.9	412.1	411.3
17.5°	408.1	402.7	402.9	401.6	401.5
20°	401.3	395.7	395.1	393.6	394.4
22.5°	393.9	388.0	387.4	385.3	386.4
25°	381.6	375.2	374.7	372.4	373.6
27.5°	367.5	361.1	361.1	357.9	359.1
30°	357.0	350.9	351.6	347.8	349.3
32.5°	345.9	340.4	340.8	337.0	338.5
35°	328.1	323.5	323.4	320.4	321.5
37.5°	309.9	305.9	305.2	303.5	303.8
40°	297.2	293.8	292.6	291.4	291.4
42.5°	284.0	280.9	279.6	278.8	278.5
45°	263.7	261.4	260.2	259.4	259.1
47.5°	243.6	241.5	240.5	239.9	239.6
50°	229.8	228.3	227.8	226.7	226.3
52.5°	215.9	215.0	214.6	213.1	212.7
55°	195.5	195.1	195.5	192.7	192.4
57.5°	174.2	174.8	176.0	172.4	171.5
60°	160.0	161.5	163.1	158.8	157.3
62.5°	145.5	147.9	150.1	145.2	143.1
65°	123.7	127.5	129.9	124.8	120.7
67.5°	102.8	107.4	110.3	104.8	100.2
70°	88.3	93.6	96.8	91.2	86.0
72.5°	75.6	81.5	84.1	78.9	73.6
75°	57.1	62.3	65.5	61.2	55.5
77.5°	40.5	45.5	48.1	44.3	39.6
80°	29.7	35.0	37.0	33.8	30.1
82.5°	21.0	25.4	26.8	24.9	22.4
85°	9.6	12.7	14.3	13.5	12.7
87.5°	2.9	6.0	8.9	9.1	9.2
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

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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)