

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-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, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

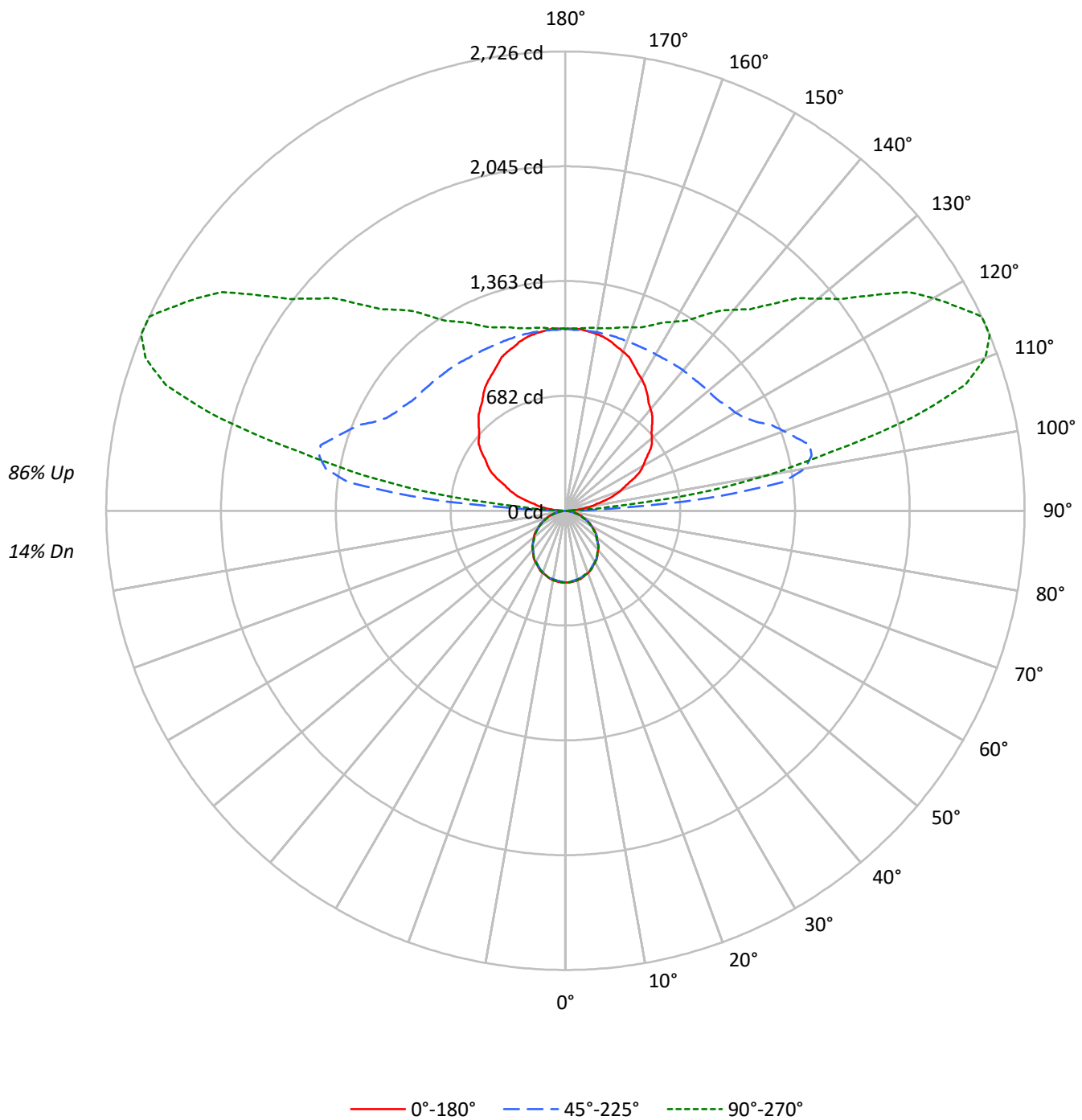
Lumens per Lamp: N/A
Luminaire Lumens: 8120.9 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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				10
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	64	64	64	43	43	43	23	23	23
1	90	86	82	79	78	75	72	69	55	54	52	37	36	35	21	20	20
2	82	75	69	64	71	66	61	57	48	45	43	33	31	29	18	17	16
3	74	66	59	53	65	58	52	47	43	39	36	29	27	25	16	15	14
4	68	58	50	45	59	51	45	40	38	34	30	26	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	26	22	24	20	17	17	14	12	10	8	7
9	45	34	26	22	39	30	24	19	22	18	15	15	13	11	9	7	6
10	42	31	24	19	37	27	21	17	20	16	13	14	11	9	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2617	2617	2617
5°	2623	2591	2612
10°	2614	2582	2600
15°	2596	2564	2585
20°	2572	2542	2561
25°	2543	2512	2535
30°	2508	2487	2504
35°	2480	2450	2463
40°	2432	2410	2414
45°	2383	2363	2363
50°	2332	2310	2299
55°	2278	2248	2235
60°	2192	2158	2144
65°	2089	2048	2022
70°	1946	1904	1863
75°	1747	1692	1652
80°	1413	1392	1353
85°	847	967	1002

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 2388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	0.5
10°-20°	114.3	1.4
20°-30°	171.7	2.1
30°-40°	204.9	2.5
40°-50°	210.0	2.6
50°-60°	187.3	2.3
60°-70°	139.5	1.7
70°-80°	75.7	0.9
80°-90°	19.8	0.2
90°-100°	501.5	6.2
100°-110°	1356.0	16.7
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°	326.1	4.0
0°-40°	531.0	6.5
0°-60°	928.3	11.4
0°-90°	1163.2	14.3
90°-120°	3283.2	40.4
90°-150°	6046.7	74.5
90°-180°	6958.0	85.7
0°-180°	8120.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	425	424	420	424	423	40
15°	408	407	403	406	406	115
25°	375	374	370	372	374	173
35°	330	329	326	326	328	206
45°	274	274	272	271	272	211
55°	212	212	210	208	208	189
65°	144	143	141	139	139	142
75°	74	73	71	70	70	78
85°	12	13	14	14	14	17
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°	425.4	425.4	425.4	425.4	425.4
2.5°	426.7	425.9	422.2	425.4	424.9
5°	424.8	424.3	419.7	423.7	423.1
7.5°	421.7	420.6	416.2	420.0	419.5
10°	418.5	417.4	413.4	416.8	416.3
12.5°	414.4	413.8	409.3	412.7	412.6
15°	407.7	406.6	402.6	406.0	406.0
17.5°	398.8	398.2	394.3	397.6	397.1
20°	392.9	391.8	388.4	391.2	391.2
22.5°	385.6	385.0	381.5	383.9	384.4
25°	374.7	373.6	370.1	372.4	373.6
27.5°	362.6	361.7	358.9	360.4	361.1
30°	353.1	353.1	350.2	350.8	352.5
32.5°	344.4	344.4	341.1	341.7	342.5
35°	330.3	329.2	326.3	326.3	328.0
37.5°	313.9	313.3	311.5	311.2	311.6
40°	302.9	302.4	300.1	300.7	300.7
42.5°	292.0	291.5	289.2	288.4	289.3
45°	273.9	274.5	271.6	271.1	271.6
47.5°	256.0	256.0	253.7	252.2	253.1
50°	243.7	243.7	241.4	240.3	240.3
52.5°	231.0	231.4	228.7	227.1	227.6
55°	212.4	212.4	209.6	207.9	208.4
57.5°	191.9	191.9	189.1	187.4	188.4
60°	178.2	178.2	175.4	173.7	174.3
62.5°	164.6	164.6	161.7	160.0	160.1
65°	143.5	142.9	140.7	138.9	138.9
67.5°	123.2	121.8	120.0	117.8	117.8
70°	108.2	107.6	105.9	103.6	103.6
72.5°	94.5	93.5	91.8	90.0	90.0
75°	73.5	72.9	71.2	70.0	69.5
77.5°	52.6	52.2	52.0	50.5	50.9
80°	39.9	39.9	39.3	38.2	38.2
82.5°	28.5	28.9	27.9	27.7	27.2
85°	12.0	13.1	13.7	14.2	14.2
87.5°	2.7	5.0	6.2	6.9	6.7
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

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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)