

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: P521658

Luminaire Tested: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521658  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9235.2 lumens  
Efficiency: N/A  
Efficacy: 129.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

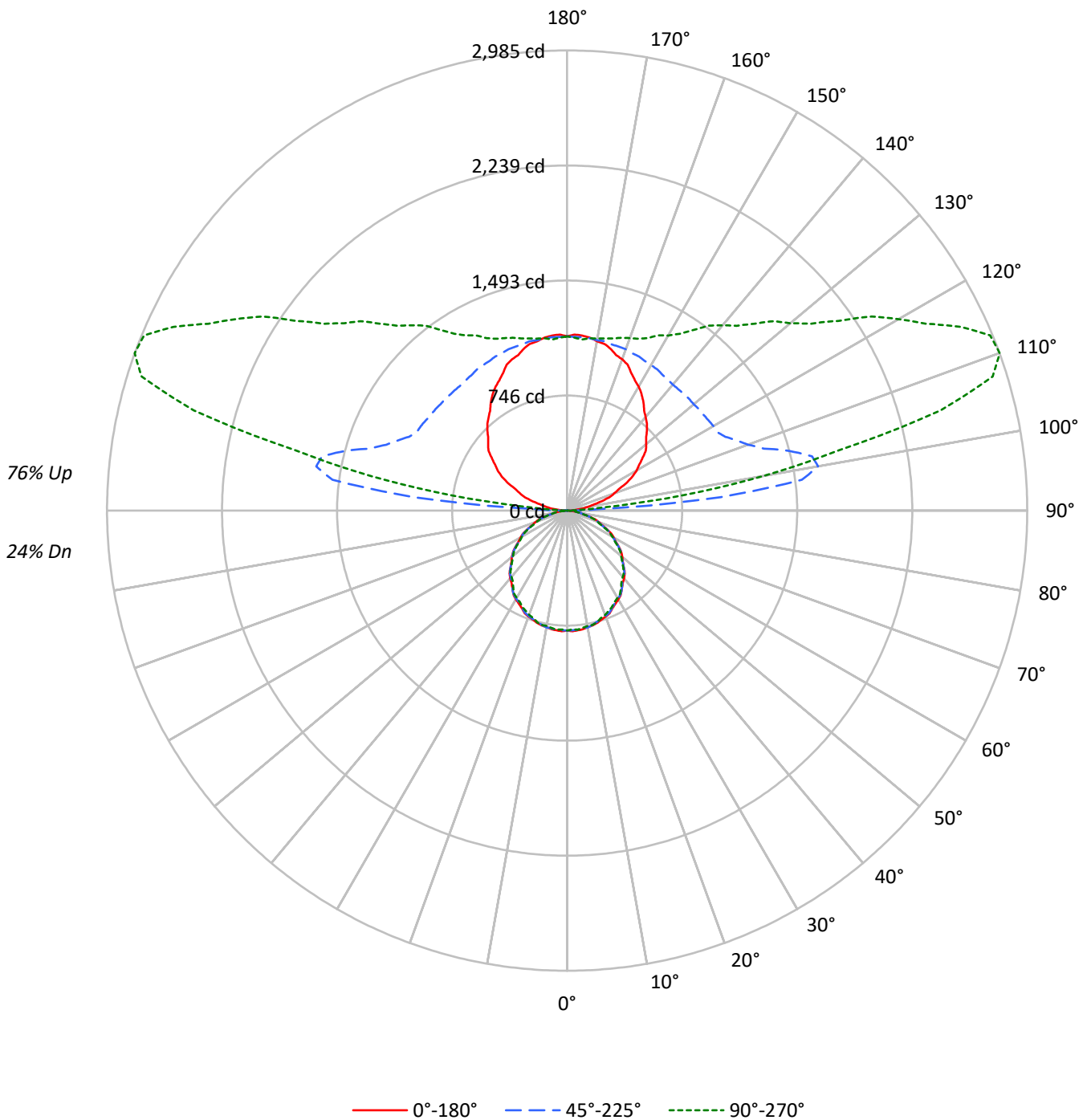
Input Watts (W): 71.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	76	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	54	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	69	59	52	46	61	53	46	41	41	36	33	30	27	24	19	18	16	12
5	64	52	45	39	56	47	40	35	36	32	28	27	23	21	17	16	14	10
6	58	47	39	33	52	42	35	30	33	28	24	24	21	18	16	14	12	9
7	54	42	34	29	48	38	31	26	29	25	21	22	18	16	14	12	11	8
8	50	38	31	25	44	34	28	23	27	22	19	20	16	14	13	11	10	7
9	46	35	27	22	41	31	25	20	24	20	17	18	15	13	12	10	9	6
10	43	31	25	20	38	28	22	18	22	18	15	17	13	11	11	9	8	6

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7176	7176	7176
5°	7223	7174	7183
10°	7188	7207	7117
15°	7206	7135	7166
20°	7178	7147	7074
25°	7096	7054	7010
30°	7076	7031	6963
35°	6967	6967	6860
40°	6913	6849	6760
45°	6784	6784	6687
50°	6702	6656	6564
55°	6589	6519	6418
60°	6442	6324	6226
65°	6185	6045	5929
70°	5897	5697	5552
75°	5258	5105	5030
80°	4341	4282	4229
85°	3144	3483	3483

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6784 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	0.8
10°-20°	211.0	2.3
20°-30°	318.7	3.5
30°-40°	383.9	4.2
40°-50°	398.0	4.3
50°-60°	360.9	3.9
60°-70°	274.3	3.0
70°-80°	152.7	1.7
80°-90°	39.4	0.4
90°-100°	515.2	5.6
100°-110°	1465.8	15.9
110°-120°	1404.4	15.2
120°-130°	1111.5	12.0
130°-140°	892.2	9.7
140°-150°	698.5	7.6
150°-160°	511.1	5.5
160°-170°	316.6	3.4
170°-180°	107.4	1.2
0°-30°	603.3	6.5
0°-40°	987.2	10.7
0°-60°	1746.1	18.9
0°-90°	2212.6	24.0
90°-120°	3385.4	36.7
90°-150°	6087.6	65.9
90°-180°	7023.0	76.0
0°-180°	9235.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	780	770	775	776	776	74
15°	754	747	747	747	750	213
25°	697	692	693	689	689	323
35°	619	612	619	611	609	388
45°	520	517	520	510	512	402
55°	410	408	405	401	399	365
65°	283	282	277	274	272	281
75°	148	145	143	141	141	157
85°	30	32	33	34	33	36
90°	0	0	0	0	0	4
95°	56	222	997	345	213	64
105°	228	346	1494	2639	2508	241
115°	423	512	1133	2400	2818	417
125°	598	663	1081	1794	2145	535
135°	731	792	1068	1516	1713	564
145°	862	906	1077	1312	1429	538
155°	984	1008	1103	1185	1234	455
165°	1088	1092	1116	1140	1156	306
175°	1139	1133	1128	1122	1113	108
180°	1131	1131	1131	1131	1131	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	777.8	777.8	777.8	777.8	777.8
2.5°	783.7	775.4	776.9	777.6	771.8
5°	779.9	770.5	774.6	775.6	775.6
7.5°	776.5	769.2	771.8	768.6	768.2
10°	767.2	764.0	769.3	761.8	759.7
12.5°	762.9	758.1	759.1	757.6	759.7
15°	754.4	747.2	747.0	747.1	750.2
17.5°	741.3	731.9	738.1	731.5	730.7
20°	731.1	721.7	727.9	720.5	720.5
22.5°	720.9	709.9	716.0	706.0	703.5
25°	697.1	691.9	692.9	688.6	688.6
27.5°	680.4	668.9	672.7	666.8	667.2
30°	664.2	652.8	660.0	651.5	653.6
32.5°	648.1	640.8	644.7	635.5	639.2
35°	618.6	612.4	618.6	611.1	609.1
37.5°	592.7	586.3	588.3	583.5	578.3
40°	574.0	566.8	568.7	562.3	561.3
42.5°	553.7	548.9	549.2	543.7	544.3
45°	519.9	516.8	519.9	510.4	512.5
47.5°	489.8	486.1	485.8	479.4	481.9
50°	466.9	464.8	463.7	457.3	457.3
52.5°	443.1	441.0	439.9	435.2	434.4
55°	409.6	408.5	405.3	401.0	399.0
57.5°	372.9	370.8	369.0	364.5	362.9
60°	349.1	347.0	342.7	337.4	337.4
62.5°	322.8	320.7	315.6	313.6	310.3
65°	283.3	282.3	276.9	273.7	271.6
67.5°	244.0	240.7	238.3	234.2	232.2
70°	218.6	214.4	211.2	207.9	205.8
72.5°	190.6	187.2	184.0	182.4	179.5
75°	147.5	145.4	143.2	141.1	141.1
77.5°	107.2	106.5	104.4	104.4	103.3
80°	81.7	82.7	80.6	80.6	79.6
82.5°	58.8	59.8	59.4	60.2	59.2
85°	29.7	31.8	32.9	33.9	32.9
87.5°	8.5	11.0	12.7	13.6	13.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.2	91.2	211.5	61.6	46.4
95°	55.9	221.9	997.3	345.2	212.8
97.5°	102.7	259.9	1535.9	1099.1	753.1
100°	135.4	282.5	1652.8	1674.2	1289.6
102.5°	171.5	306.9	1627.1	2143.0	1807.2
105°	227.8	345.5	1493.8	2638.6	2508.3
107.5°	285.0	390.5	1338.2	2778.3	2894.3
110°	324.6	423.3	1248.8	2724.8	2985.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	362.4	456.1	1188.6	2598.4	2970.0
115°	423.4	511.7	1132.7	2399.6	2817.8
117.5°	477.2	560.0	1099.6	2182.2	2625.2
120°	520.1	589.5	1096.2	2058.0	2482.5
122.5°	554.5	623.9	1087.6	1949.0	2343.2
125°	597.5	662.7	1081.1	1794.1	2145.0
127.5°	644.4	705.3	1077.7	1701.5	1990.7
130°	668.4	729.4	1072.5	1637.1	1889.3
132.5°	694.2	753.5	1072.5	1586.8	1818.8
135°	730.8	791.7	1068.2	1515.5	1713.0
137.5°	765.2	824.4	1067.8	1455.1	1625.8
140°	791.0	851.9	1066.1	1405.1	1569.0
142.5°	820.2	871.0	1071.2	1365.2	1512.3
145°	861.9	906.0	1076.8	1311.6	1429.3
147.5°	897.6	940.4	1086.3	1257.5	1359.2
150°	928.5	957.9	1089.7	1239.6	1311.1
152.5°	952.6	983.7	1093.2	1215.5	1281.9
155°	984.4	1007.5	1102.6	1185.4	1233.7
157.5°	1023.9	1037.8	1104.8	1171.7	1206.2
160°	1044.6	1055.1	1113.4	1161.3	1190.7
162.5°	1056.6	1068.8	1115.1	1152.6	1175.3
165°	1087.6	1091.8	1115.5	1139.5	1156.3
167.5°	1108.6	1104.8	1125.4	1136.3	1143.0
170°	1115.5	1113.4	1122.0	1124.3	1132.7
172.5°	1131.0	1123.8	1127.1	1120.8	1127.5
175°	1139.2	1132.8	1128.4	1121.8	1113.4
177.5°	1142.6	1132.5	1127.1	1120.3	1122.0
180°	1130.6	1130.6	1130.6	1130.6	1130.6

(END OF REPORT)