

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: P521668

Luminaire Tested: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521668  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9919.7 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

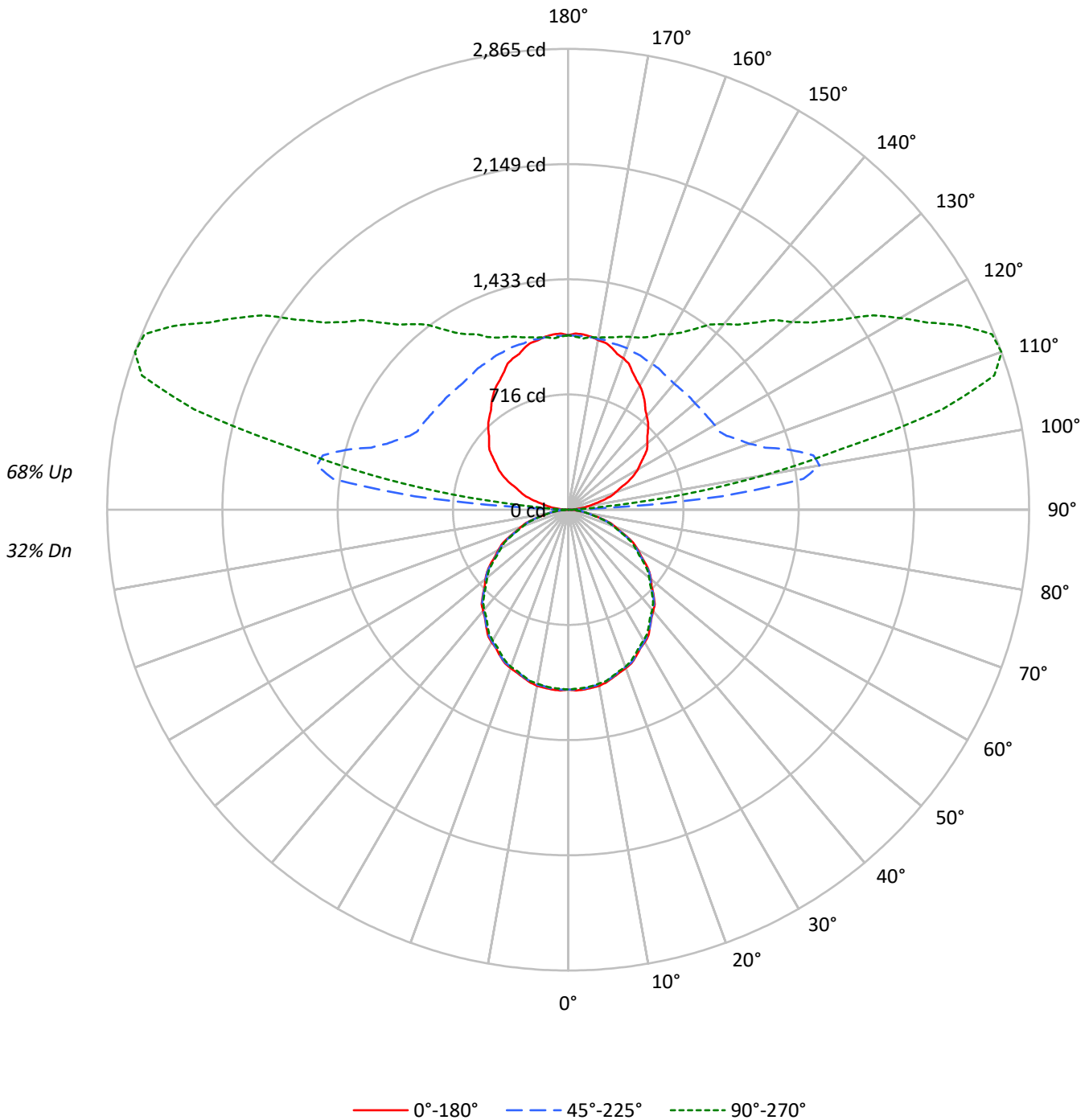
Input Watts (W): 83.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	31	29	28	22
3	78	68	61	56	70	62	56	51	49	45	41	38	35	32	27	25	24	19
4	71	60	53	47	63	55	48	43	44	39	35	33	30	27	24	22	20	16
5	65	54	46	40	58	48	42	36	39	34	30	30	26	24	22	19	17	14
6	60	48	40	34	53	43	37	31	35	30	26	27	23	21	19	17	15	12
7	55	43	35	30	49	39	32	27	31	26	23	24	21	18	18	15	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	20	17	14	15	13	11	9
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	11	10	8

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

	0°	45°	90°
0°	10316	10316	10316
5°	10393	10355	10299
10°	10418	10341	10293
15°	10310	10271	10222
20°	10288	10218	10208
25°	10200	10180	10066
30°	10133	10068	9992
35°	9989	9978	9852
40°	9898	9848	9787
45°	9779	9726	9619
50°	9647	9574	9442
55°	9468	9352	9222
60°	9245	9095	8925
65°	8938	8737	8582
70°	8379	8187	7993
75°	7550	7333	7222
80°	6169	6222	6115
85°	4425	5071	5071

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9779 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	1.1
10°-20°	303.0	3.1
20°-30°	458.4	4.6
30°-40°	551.4	5.6
40°-50°	572.5	5.8
50°-60°	518.6	5.2
60°-70°	394.5	4.0
70°-80°	219.2	2.2
80°-90°	56.5	0.6
90°-100°	494.4	5.0
100°-110°	1406.7	14.2
110°-120°	1347.8	13.6
120°-130°	1066.7	10.8
130°-140°	856.2	8.6
140°-150°	670.3	6.8
150°-160°	490.5	4.9
160°-170°	303.8	3.1
170°-180°	103.1	1.0
0°-30°	867.4	8.7
0°-40°	1418.7	14.3
0°-60°	2509.8	25.3
0°-90°	3180.1	32.1
90°-120°	3249.0	32.8
90°-150°	5842.2	58.9
90°-180°	6740.0	67.9
0°-180°	9919.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1122	1112	1118	1113	1112	107
15°	1079	1070	1075	1074	1070	305
25°	1002	993	1000	990	989	462
35°	887	883	886	876	875	556
45°	750	744	745	737	737	578
55°	589	588	581	576	573	525
65°	409	403	400	394	393	403
75°	212	209	206	204	203	224
85°	42	45	48	48	48	52
90°	0	0	0	0	0	4
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1118.1	1118.1	1118.1	1118.1	1118.1
2.5°	1125.4	1115.9	1118.9	1116.4	1114.0
5°	1122.2	1112.2	1118.1	1113.0	1112.0
7.5°	1116.9	1105.1	1107.9	1106.9	1106.9
10°	1112.0	1097.0	1103.8	1098.7	1098.7
12.5°	1098.9	1086.4	1091.6	1089.0	1090.6
15°	1079.4	1070.4	1075.3	1074.2	1070.2
17.5°	1062.5	1051.7	1055.4	1053.5	1051.9
20°	1047.8	1037.9	1040.7	1035.7	1039.7
22.5°	1031.5	1021.6	1026.8	1018.5	1018.5
25°	1002.0	993.0	1000.0	989.8	988.8
27.5°	970.6	964.9	969.4	961.8	959.0
30°	951.1	942.1	945.0	939.8	937.9
32.5°	928.3	919.3	922.2	913.0	914.2
35°	886.9	883.0	885.9	875.7	874.7
37.5°	849.5	841.5	846.2	837.8	837.0
40°	821.8	813.8	817.7	812.6	812.6
42.5°	796.5	787.7	790.0	783.2	780.8
45°	749.5	744.5	745.4	737.2	737.2
47.5°	703.0	699.4	697.9	689.6	691.2
50°	672.1	666.1	667.0	657.8	657.8
52.5°	636.2	636.6	632.8	626.8	622.0
55°	588.6	587.6	581.4	576.3	573.3
57.5°	537.7	533.1	528.7	521.8	521.2
60°	501.0	498.0	492.9	486.7	483.7
62.5°	463.5	460.5	455.4	450.1	449.5
65°	409.4	403.4	400.2	394.1	393.1
67.5°	350.5	345.7	341.7	336.8	336.2
70°	310.6	306.6	303.5	299.3	296.3
72.5°	273.9	267.5	264.3	261.0	258.9
75°	211.8	208.8	205.7	203.6	202.6
77.5°	151.9	152.1	152.1	149.5	148.5
80°	116.1	117.1	117.1	116.1	115.1
82.5°	84.3	86.1	87.0	85.9	85.7
85°	41.8	44.7	47.9	47.9	47.9
87.5°	11.4	15.4	18.7	19.5	18.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)