

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: P521563

Luminaire Tested: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521563  
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-100U-075D-92765-1D-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7495.5 lumens  
Efficiency: N/A  
Efficacy: 116.6 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: General Diffuse

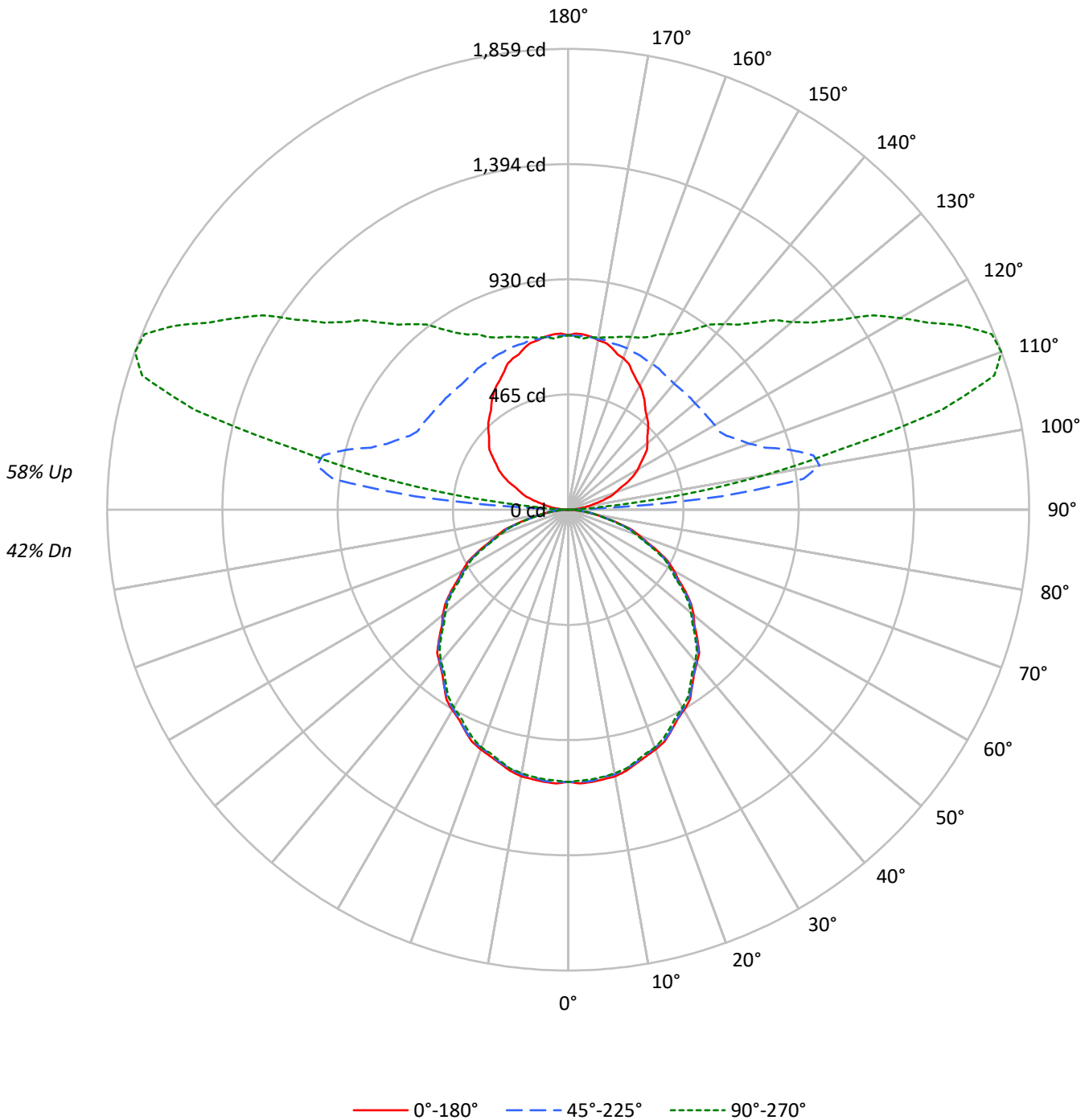
Input Watts (W): 64.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42				
1	96	91	88	84	87	84	80	77	69	66	64	55	54	52	43	42	41	35				
2	87	80	74	68	79	73	68	63	60	56	53	48	46	43	37	36	34	29				
3	79	70	63	57	72	64	58	53	53	48	44	43	39	36	33	31	29	24				
4	72	62	54	48	66	57	50	44	47	42	38	38	34	31	29	27	25	21				
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	24	21	18				
6	61	49	41	35	55	45	38	33	38	32	28	30	26	23	24	21	19	16				
7	56	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14				
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12				
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10				

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

	0°	45°	90°
0°	10130	10130	10130
5°	10206	10169	10113
10°	10230	10155	10109
15°	10125	10087	10039
20°	10103	10034	10025
25°	10017	9997	9885
30°	9950	9886	9812
35°	9810	9799	9675
40°	9719	9671	9611
45°	9603	9551	9447
50°	9473	9401	9272
55°	9297	9185	9056
60°	9079	8931	8765
65°	8776	8580	8427
70°	8228	8039	7850
75°	7415	7201	7094
80°	6057	6110	6004
85°	4340	4975	4975

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9603 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.0	1.4
10°-20°	297.5	4.0
20°-30°	450.2	6.0
30°-40°	541.5	7.2
40°-50°	562.2	7.5
50°-60°	509.3	6.8
60°-70°	387.5	5.2
70°-80°	215.3	2.9
80°-90°	55.5	0.7
90°-100°	320.7	4.3
100°-110°	912.7	12.2
110°-120°	874.4	11.7
120°-130°	692.1	9.2
130°-140°	555.5	7.4
140°-150°	434.9	5.8
150°-160°	318.2	4.2
160°-170°	197.1	2.6
170°-180°	66.9	0.9
0°-30°	851.8	11.4
0°-40°	1393.3	18.6
0°-60°	2464.7	32.9
0°-90°	3123.0	41.7
90°-120°	2107.9	28.1
90°-150°	3790.4	50.6
90°-180°	4373.0	58.3
0°-180°	7495.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1102	1092	1098	1093	1092	105
15°	1060	1051	1056	1055	1051	300
25°	984	975	982	972	971	454
35°	871	867	870	860	859	546
45°	736	731	732	724	724	568
55°	578	577	571	566	563	516
65°	402	396	393	387	386	396
75°	208	205	202	200	199	220
85°	41	44	47	47	47	51
90°	0	0	0	0	0	3
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

TEST NUMBER: P521563

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1098.0	1098.0	1098.0	1098.0	1098.0
2.5°	1105.2	1095.8	1098.8	1096.3	1094.0
5°	1102.0	1092.2	1098.0	1093.0	1092.0
7.5°	1096.8	1085.3	1088.0	1087.0	1087.0
10°	1092.0	1077.3	1084.0	1079.0	1079.0
12.5°	1079.2	1066.9	1072.0	1069.4	1071.0
15°	1060.0	1051.2	1056.0	1054.9	1051.0
17.5°	1043.4	1032.8	1036.4	1034.6	1033.0
20°	1029.0	1019.2	1022.0	1017.1	1021.0
22.5°	1013.0	1003.2	1008.4	1000.2	1000.2
25°	984.0	975.2	982.0	972.0	971.0
27.5°	953.2	947.5	952.0	944.5	941.8
30°	934.0	925.2	928.0	923.0	921.0
32.5°	911.6	902.8	905.6	896.6	897.8
35°	871.0	867.1	870.0	860.0	859.0
37.5°	834.2	826.4	831.0	822.8	822.0
40°	807.0	799.2	803.0	798.0	798.0
42.5°	782.2	773.6	775.8	769.1	766.8
45°	736.0	731.1	732.0	724.0	724.0
47.5°	690.4	686.9	685.4	677.2	678.8
50°	660.0	654.1	655.0	646.0	646.0
52.5°	624.8	625.2	621.4	615.5	610.8
55°	578.0	577.0	571.0	565.9	563.0
57.5°	528.0	523.5	519.2	512.4	511.8
60°	492.0	489.1	484.0	477.9	475.0
62.5°	455.2	452.3	447.2	442.0	441.4
65°	402.0	396.1	393.0	387.0	386.0
67.5°	344.2	339.5	335.6	330.8	330.2
70°	305.0	301.1	298.0	293.9	291.0
72.5°	269.0	262.7	259.6	256.4	254.2
75°	208.0	205.1	202.0	200.0	199.0
77.5°	149.2	149.4	149.4	146.8	145.8
80°	114.0	115.0	115.0	114.0	113.0
82.5°	82.8	84.6	85.4	84.4	84.2
85°	41.0	43.9	47.0	47.0	47.0
87.5°	11.2	15.1	18.4	19.2	18.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)