

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: P521914

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521914  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 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: 6115.6 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

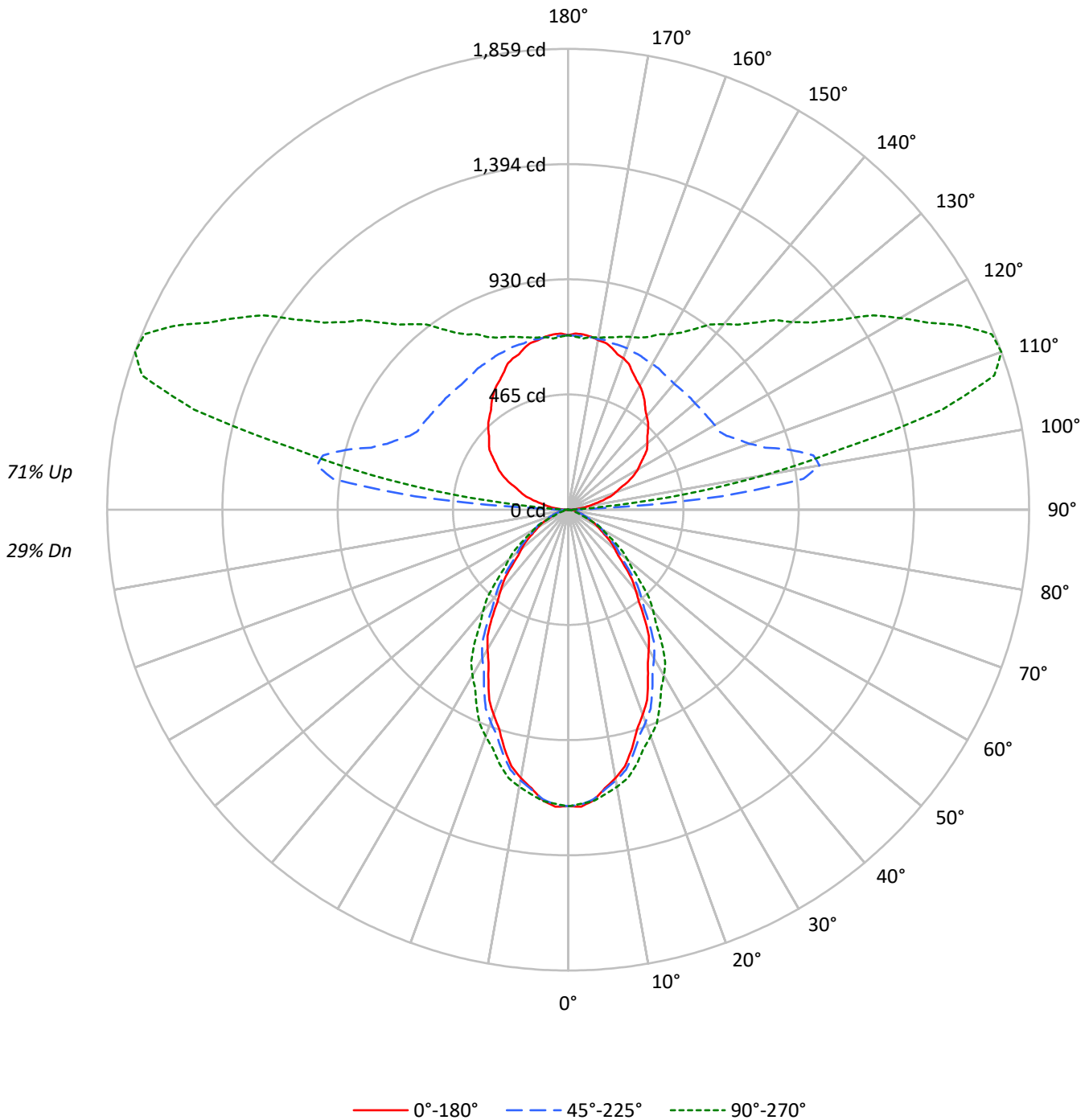
Input Watts (W): 53.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29				
1	94	90	86	83	84	81	78	75	63	61	60	48	46	45	33	32	32	25				
2	86	79	74	69	77	71	67	63	56	53	50	43	41	39	30	29	28	22				
3	79	70	63	58	70	63	58	53	50	46	43	38	36	34	27	26	25	20				
4	72	62	55	50	65	56	50	45	45	41	37	35	32	29	25	23	22	18				
5	66	56	48	43	60	51	44	39	41	36	33	31	28	26	23	21	19	16				
6	61	50	43	37	55	46	39	34	37	32	29	28	25	23	21	19	17	14				
7	57	45	38	33	51	41	35	30	33	29	25	26	23	21	19	17	16	13				
8	53	41	34	29	47	38	31	27	31	26	23	24	21	19	18	16	14	12				
9	49	38	31	26	44	34	28	24	28	24	20	22	19	17	17	15	13	11				
10	46	35	28	23	41	32	26	22	26	22	19	21	17	15	15	13	12	10				

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

	0°	45°	90°
0°	11036	11036	11036
5°	10899	10860	10923
10°	10297	10391	10631
15°	9506	9726	10162
20°	8632	8956	9549
25°	7742	8164	8896
30°	6923	7375	8220
35°	6054	6491	7419
40°	5095	5499	6423
45°	4205	4568	5363
50°	3511	3827	4468
55°	2981	3285	3690
60°	2546	2847	2945
65°	2028	2395	1901
70°	1799	1869	1160
75°	1665	1515	709
80°	1536	1392	611
85°	1387	1281	498

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5363 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.7	1.8
10°-20°	285.4	4.7
20°-30°	369.7	6.0
30°-40°	362.0	5.9
40°-50°	277.1	4.5
50°-60°	184.6	3.0
60°-70°	100.8	1.6
70°-80°	42.0	0.7
80°-90°	11.9	0.2
90°-100°	320.7	5.2
100°-110°	912.7	14.9
110°-120°	874.4	14.3
120°-130°	692.1	11.3
130°-140°	555.5	9.1
140°-150°	434.9	7.1
150°-160°	318.2	5.2
160°-170°	197.1	3.2
170°-180°	66.9	1.1
0°-30°	764.8	12.5
0°-40°	1126.7	18.4
0°-60°	1588.4	26.0
0°-90°	1743.1	28.5
90°-120°	2107.9	34.5
90°-150°	3790.4	62.0
90°-180°	4373.0	71.5
0°-180°	6115.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1177	1165	1173	1175	1179	109
15°	995	992	1018	1046	1064	278
25°	760	763	802	837	874	350
35°	538	540	576	615	659	334
45°	322	328	350	377	411	251
55°	185	193	204	212	229	168
65°	93	101	110	96	87	97
75°	47	47	42	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	2
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	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1196.2	1196.2	1196.2	1196.2	1196.2
2.5°	1199.1	1188.5	1191.2	1191.1	1187.8
5°	1176.8	1165.0	1172.6	1175.3	1179.4
7.5°	1133.1	1124.2	1138.0	1148.3	1156.6
10°	1099.1	1091.4	1109.1	1124.0	1134.8
12.5°	1059.6	1053.2	1075.0	1095.1	1109.2
15°	995.2	991.6	1018.3	1046.0	1063.9
17.5°	926.2	924.4	955.1	987.4	1010.4
20°	879.2	878.7	912.2	945.9	972.6
22.5°	831.7	832.8	868.1	903.2	933.5
25°	760.5	762.6	802.0	837.0	873.9
27.5°	694.7	695.6	736.4	773.3	812.7
30°	649.8	652.4	692.3	730.5	771.6
32.5°	604.9	607.8	647.0	686.4	728.3
35°	537.5	540.0	576.3	615.1	658.7
37.5°	468.0	471.5	503.7	540.3	583.2
40°	423.0	428.2	456.6	491.2	533.3
42.5°	379.8	386.2	412.6	445.3	483.3
45°	322.3	328.4	350.1	376.6	411.0
47.5°	272.7	279.8	296.4	319.3	348.6
50°	244.6	251.3	266.6	283.5	311.3
52.5°	219.8	226.5	240.2	253.2	276.8
55°	185.3	193.0	204.2	211.9	229.4
57.5°	156.9	164.3	173.2	176.7	187.3
60°	138.0	146.3	154.3	153.9	159.6
62.5°	120.8	127.8	135.8	130.3	130.6
65°	92.9	100.6	109.7	95.9	87.1
67.5°	75.1	76.7	86.1	66.8	56.5
70°	66.7	66.7	69.3	51.8	43.0
72.5°	58.7	58.7	56.3	42.1	33.0
75°	46.7	46.7	42.5	29.2	19.9
77.5°	36.0	35.6	32.5	21.8	14.5
80°	28.9	28.9	26.2	17.2	11.5
82.5°	22.6	22.6	20.4	13.4	8.6
85°	13.1	13.1	12.1	7.8	4.7
87.5°	4.6	4.6	4.2	2.5	2.1
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)