

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: P521810

Luminaire Tested: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521810  
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-075U-050D-92765-1D-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 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: 5010.4 lumens  
Efficiency: N/A  
Efficacy: 112.8 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

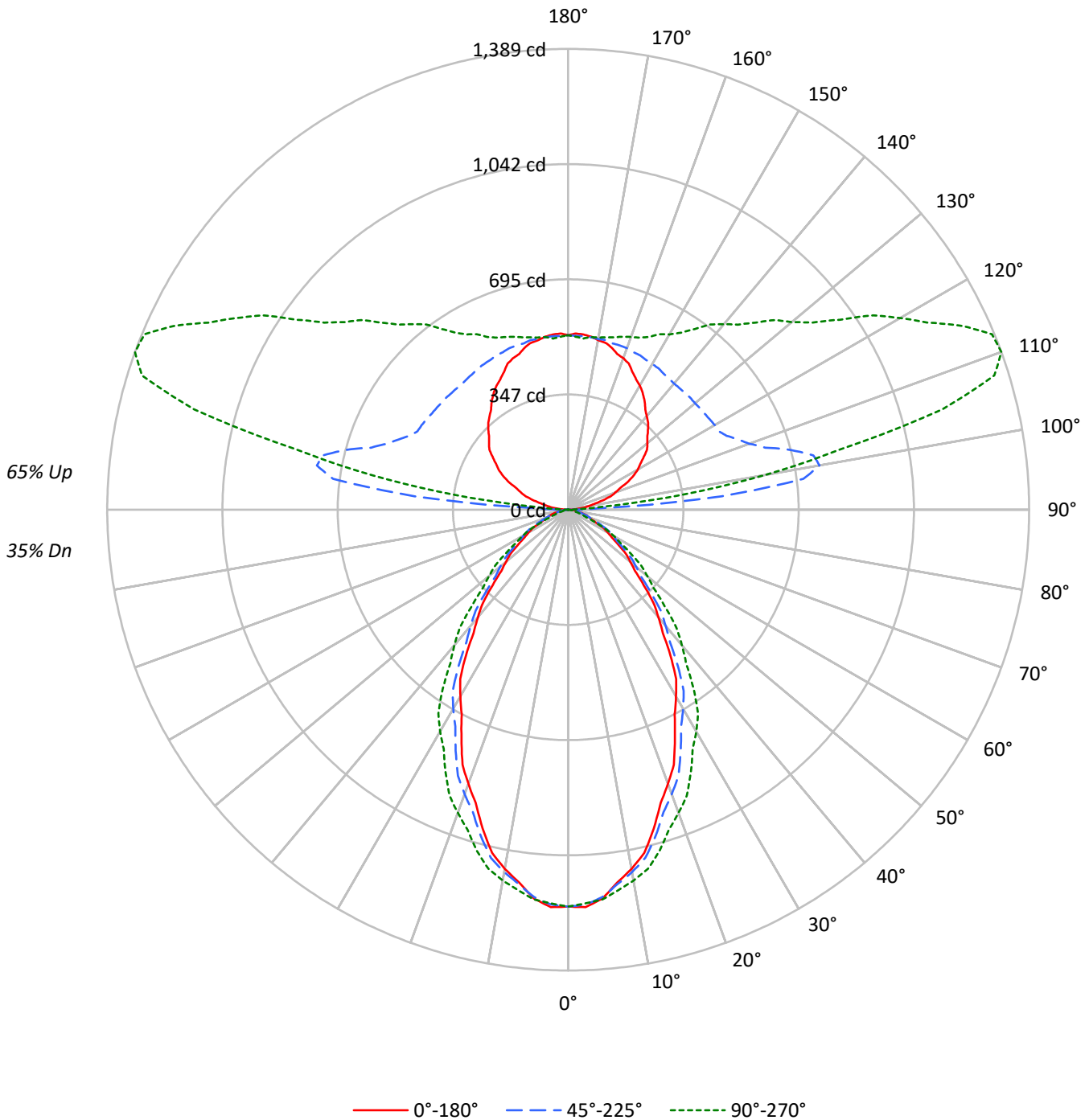
Input Watts (W): 44.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35																				
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	38	38	37	31																				
2	87	81	75	70	79	73	69	65	59	56	53	47	45	43	35	34	33	27																				
3	80	72	65	60	72	65	60	55	53	49	46	42	39	37	32	30	29	24																				
4	74	64	57	51	67	58	52	47	48	43	40	38	35	33	29	27	25	21																				
5	68	57	50	44	61	52	46	41	43	38	35	34	31	29	26	24	23	19																				
6	63	52	44	39	57	47	41	36	39	34	31	31	28	26	24	22	20	17																				
7	58	47	39	34	53	43	37	32	36	31	27	29	25	23	22	20	19	16																				
8	54	43	35	31	49	39	33	29	33	28	25	27	23	21	21	19	17	14																				
9	50	39	32	27	46	36	30	26	30	25	22	25	21	19	19	17	15	13																				
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12																				

**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	2.2
10°-20°	285.4	5.7
20°-30°	369.7	7.4
30°-40°	362.0	7.2
40°-50°	277.1	5.5
50°-60°	184.6	3.7
60°-70°	100.8	2.0
70°-80°	42.0	0.8
80°-90°	11.9	0.2
90°-100°	239.7	4.8
100°-110°	682.0	13.6
110°-120°	653.4	13.0
120°-130°	517.2	10.3
130°-140°	415.1	8.3
140°-150°	325.0	6.5
150°-160°	237.8	4.7
160°-170°	147.3	2.9
170°-180°	50.0	1.0
0°-30°	764.8	15.3
0°-40°	1126.7	22.5
0°-60°	1588.4	31.7
0°-90°	1743.1	34.8
90°-120°	1575.1	31.4
90°-150°	2832.3	56.5
90°-180°	3267.0	65.2
0°-180°	5010.4	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°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

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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°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)