

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: P521813

Luminaire Tested: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521813  
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\_5000K  
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 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5241.7 lumens  
Efficiency: N/A  
Efficacy: 118.3 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

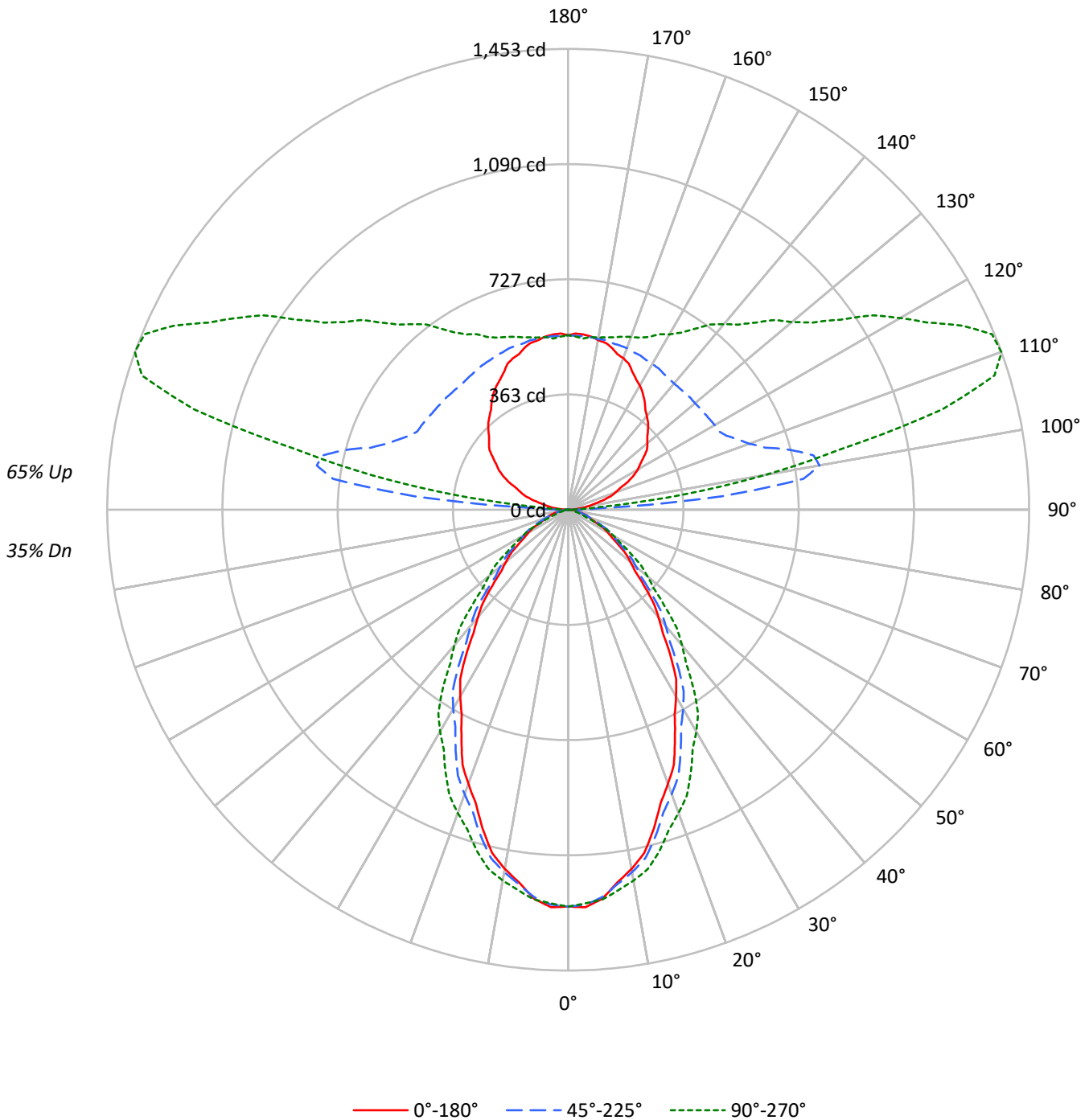
Input Watts (W): 44.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20									20									20									20										
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°	11546	11546	11546
5°	11402	11361	11427
10°	10772	10870	11122
15°	9944	10175	10631
20°	9031	9370	9990
25°	8100	8541	9308
30°	7242	7716	8600
35°	6333	6791	7761
40°	5331	5753	6719
45°	4400	4779	5611
50°	3673	4003	4673
55°	3117	3436	3860
60°	2665	2978	3080
65°	2122	2506	1991
70°	1880	1956	1214
75°	1743	1586	745
80°	1605	1461	643
85°	1450	1334	519

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5611 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.8	2.2
10°-20°	298.6	5.7
20°-30°	386.7	7.4
30°-40°	378.7	7.2
40°-50°	289.9	5.5
50°-60°	193.2	3.7
60°-70°	105.4	2.0
70°-80°	43.9	0.8
80°-90°	12.4	0.2
90°-100°	250.8	4.8
100°-110°	713.5	13.6
110°-120°	683.6	13.0
120°-130°	541.0	10.3
130°-140°	434.3	8.3
140°-150°	340.0	6.5
150°-160°	248.8	4.7
160°-170°	154.1	2.9
170°-180°	52.3	1.0
0°-30°	800.1	15.3
0°-40°	1178.8	22.5
0°-60°	1661.8	31.7
0°-90°	1823.5	34.8
90°-120°	1647.8	31.4
90°-150°	2963.1	56.5
90°-180°	3418.0	65.2
0°-180°	5241.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1231	1219	1227	1230	1234	115
15°	1041	1037	1065	1094	1113	291
25°	796	798	839	876	914	366
35°	562	565	603	644	689	350
45°	337	344	366	394	430	263
55°	194	202	214	222	240	176
65°	97	105	115	100	91	101
75°	49	49	44	30	21	52
85°	14	14	13	8	5	15
90°	0	0	0	0	0	2
95°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1251.4	1251.4	1251.4	1251.4	1251.4
2.5°	1254.5	1243.3	1246.1	1246.1	1242.6
5°	1231.1	1218.8	1226.7	1229.5	1233.8
7.5°	1185.4	1176.1	1190.6	1201.3	1210.0
10°	1149.8	1141.8	1160.3	1175.9	1187.2
12.5°	1108.5	1101.8	1124.7	1145.7	1160.4
15°	1041.1	1037.3	1065.3	1094.2	1113.0
17.5°	969.0	967.1	999.2	1033.0	1057.0
20°	919.8	919.2	954.3	989.6	1017.5
22.5°	870.1	871.3	908.2	944.9	976.6
25°	795.7	797.8	839.0	875.6	914.3
27.5°	726.8	727.8	770.4	809.0	850.2
30°	679.8	682.5	724.3	764.2	807.2
32.5°	632.8	635.9	676.8	718.1	761.9
35°	562.3	565.0	602.9	643.5	689.1
37.5°	489.6	493.2	526.9	565.3	610.2
40°	442.6	447.9	477.7	513.9	557.9
42.5°	397.3	404.0	431.6	465.9	505.6
45°	337.2	343.6	366.3	394.0	430.0
47.5°	285.3	292.7	310.1	334.0	364.7
50°	255.9	262.9	278.9	296.6	325.6
52.5°	230.0	236.9	251.3	264.9	289.6
55°	193.8	201.9	213.6	221.7	240.0
57.5°	164.2	171.9	181.2	184.9	195.9
60°	144.4	153.0	161.4	161.0	166.9
62.5°	126.4	133.7	142.1	136.3	136.6
65°	97.2	105.2	114.8	100.3	91.2
67.5°	78.5	80.2	90.1	69.9	59.1
70°	69.7	69.7	72.5	54.2	45.0
72.5°	61.4	61.4	58.9	44.0	34.5
75°	48.9	48.9	44.5	30.5	20.9
77.5°	37.7	37.2	34.0	22.8	15.2
80°	30.2	30.2	27.5	18.0	12.1
82.5°	23.6	23.6	21.3	14.1	9.0
85°	13.7	13.7	12.6	8.2	4.9
87.5°	4.8	4.8	4.4	2.6	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)