

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: P521709

Luminaire Tested: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521709  
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-025U-050D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 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: 3849.7 lumens  
Efficiency: N/A  
Efficacy: 110.9 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: General Diffuse

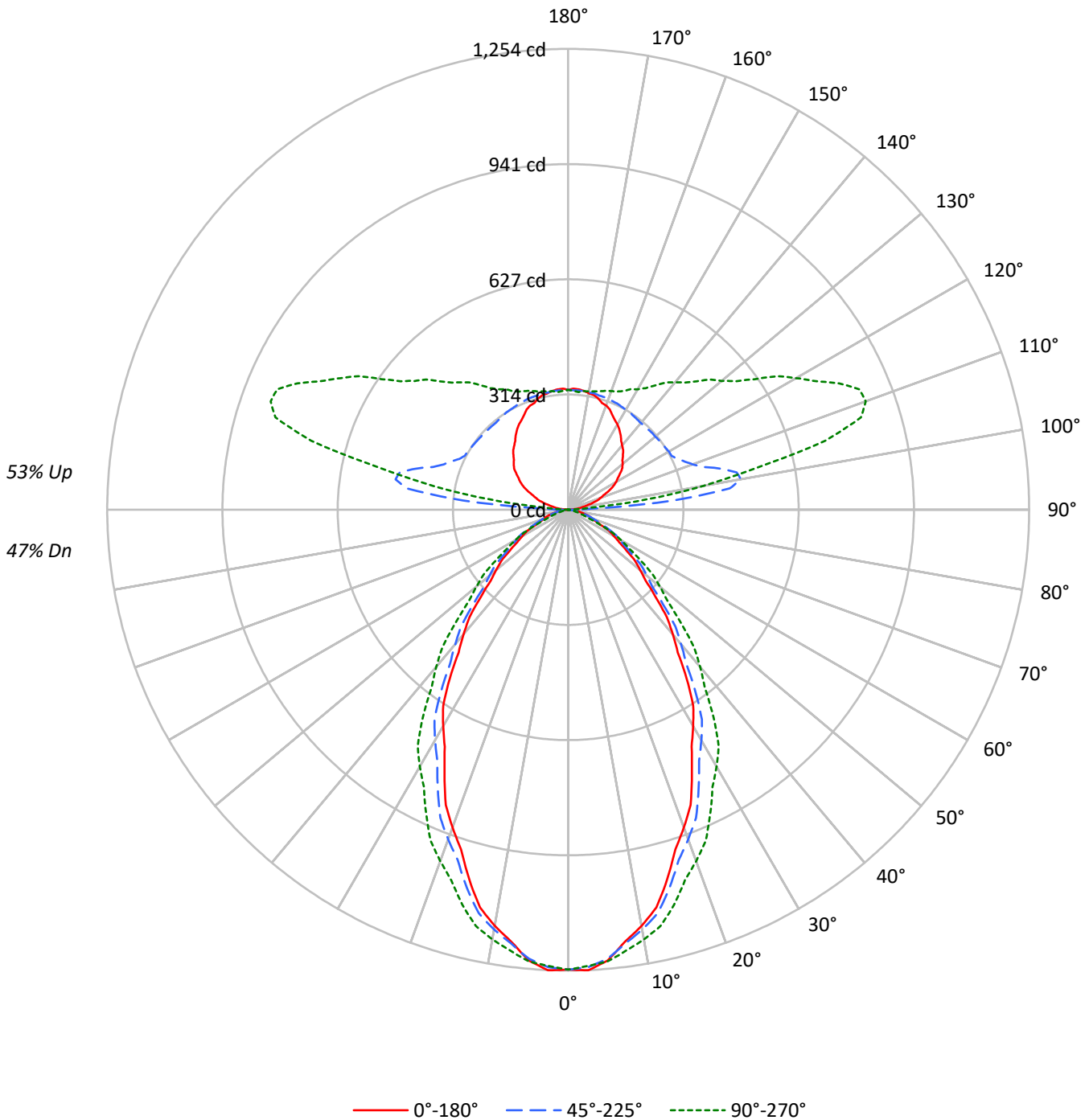
Input Watts (W): 34.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4\_5000K

**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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47
1	98	94	91	88	90	87	84	81	73	71	69	61	59	58	49	48	47	42				42
2	90	84	78	74	83	77	73	69	66	62	59	55	52	50	45	43	42	37				37
3	83	75	68	63	76	69	63	59	59	55	51	49	46	44	41	39	37	33				33
4	77	67	60	54	71	62	56	51	53	48	45	45	41	39	37	35	33	29				29
5	71	60	53	47	65	56	49	45	48	43	39	41	37	34	34	31	29	26				26
6	66	54	47	42	61	51	44	39	44	39	35	37	34	31	31	29	26	24				24
7	61	50	42	37	56	46	40	35	40	35	31	34	31	28	29	26	24	21				21
8	57	45	38	33	53	42	36	31	37	32	28	32	28	25	27	24	22	20				20
9	53	42	35	30	49	39	33	28	34	29	26	29	26	23	25	22	20	18				18
10	50	38	32	27	46	36	30	26	32	27	23	27	24	21	23	21	19	17				17

**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

TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.8	3.0
10°-20°	298.6	7.8
20°-30°	386.7	10.0
30°-40°	378.7	9.8
40°-50°	289.9	7.5
50°-60°	193.2	5.0
60°-70°	105.4	2.7
70°-80°	43.9	1.1
80°-90°	12.4	0.3
90°-100°	148.6	3.9
100°-110°	422.9	11.0
110°-120°	405.2	10.5
120°-130°	320.7	8.3
130°-140°	257.4	6.7
140°-150°	201.5	5.2
150°-160°	147.4	3.8
160°-170°	91.3	2.4
170°-180°	31.0	0.8
0°-30°	800.1	20.8
0°-40°	1178.8	30.6
0°-60°	1661.8	43.2
0°-90°	1823.5	47.4
90°-120°	976.8	25.4
90°-150°	1756.4	45.6
90°-180°	2026.0	52.6
0°-180°	3849.7	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	1
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4\_5000K

**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°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

TEST NUMBER: P521709

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)