

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: P521798

Luminaire Tested: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521798  
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-050U-125D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

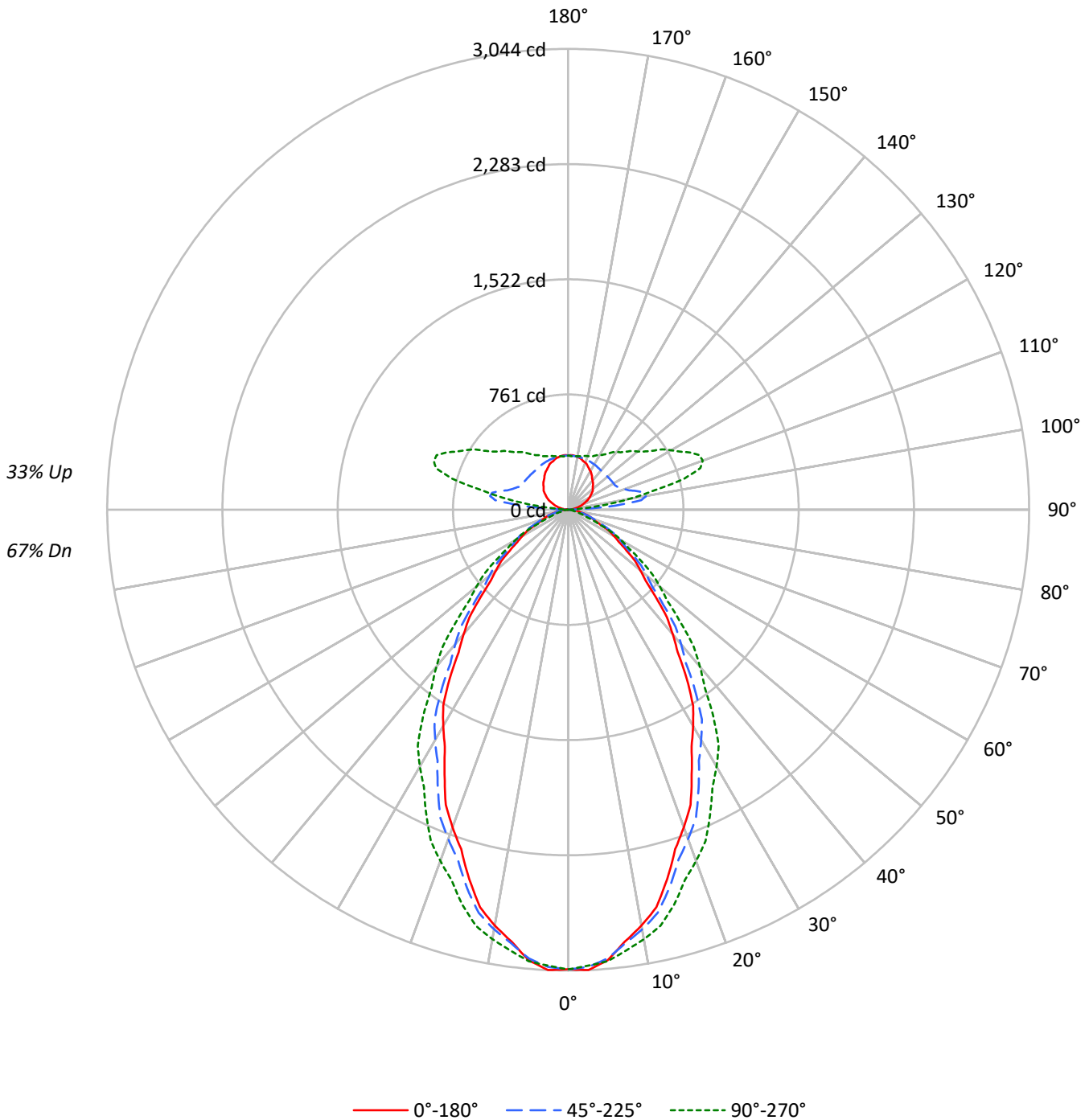
Lumens per Lamp: N/A  
Luminaire Lumens: 6646.9 lumens  
Efficiency: N/A  
Efficacy: 92.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 71.6  
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	111	111	111	111	105	105	105	105	93	93	93	81	81	81	71	71	71	67																				
1	103	99	96	93	97	94	91	88	83	81	79	74	72	71	65	64	63	59																				
2	95	88	83	78	90	84	79	75	75	71	68	67	64	62	60	57	56	52																				
3	88	79	73	67	83	75	69	65	68	63	59	61	57	54	54	52	49	46																				
4	81	71	64	59	77	68	61	56	61	56	52	55	51	48	50	47	44	41																				
5	75	65	57	52	71	62	55	50	56	50	46	51	46	43	46	42	39	37																				
6	70	59	51	46	66	56	49	44	51	46	41	46	42	38	42	38	36	33																				
7	65	54	46	41	62	51	45	40	47	41	37	43	38	35	39	35	32	30																				
8	61	49	42	37	58	47	41	36	43	38	34	40	35	32	36	32	30	28																				
9	57	46	38	34	54	44	37	33	40	35	31	37	32	29	34	30	27	25																				
10	54	42	35	31	51	41	34	30	37	32	28	34	30	27	32	28	25	23																				

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

	0°	45°	90°
0°	28012	28012	28012
5°	27662	27564	27724
10°	26135	26372	26984
15°	24127	24686	25793
20°	21910	22733	24238
25°	19651	20722	22580
30°	17571	18720	20864
35°	15365	16476	18831
40°	12933	13959	16301
45°	10673	11594	13610
50°	8911	9714	11339
55°	7565	8335	9365
60°	6466	7228	7473
65°	5148	6078	4827
70°	4564	4745	2946
75°	4228	3846	1804
80°	3895	3539	1557
85°	3525	3239	1270

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13610 cd/sqm

TEST NUMBER: P521798

CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4\_4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.5	4.2
10°-20°	724.4	10.9
20°-30°	938.2	14.1
30°-40°	918.8	13.8
40°-50°	703.3	10.6
50°-60°	468.6	7.1
60°-70°	255.7	3.8
70°-80°	106.6	1.6
80°-90°	30.2	0.5
90°-100°	163.0	2.5
100°-110°	463.9	7.0
110°-120°	444.5	6.7
120°-130°	351.8	5.3
130°-140°	282.4	4.2
140°-150°	221.1	3.3
150°-160°	161.8	2.4
160°-170°	100.2	1.5
170°-180°	34.0	0.5
0°-30°	1941.1	29.2
0°-40°	2859.9	43.0
0°-60°	4031.7	60.7
0°-90°	4424.2	66.6
90°-120°	1071.5	16.1
90°-150°	1926.7	29.0
90°-180°	2223.0	33.4
0°-180°	6646.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3036	3036	3036	3036	3036	
5°	2987	2957	2976	2983	2994	278
15°	2526	2517	2584	2655	2700	705
25°	1930	1936	2036	2124	2218	888
35°	1364	1371	1463	1561	1672	848
45°	818	834	889	956	1043	638
55°	470	490	518	538	582	426
65°	236	255	278	243	221	245
75°	119	119	108	74	51	127
85°	33	33	31	20	12	36
90°	0	0	0	0	0	2
95°	18	70	316	109	67	20
105°	72	109	473	835	794	76
115°	134	162	358	760	892	132
125°	189	210	342	568	679	169
135°	231	251	338	480	542	178
145°	273	287	341	415	452	170
155°	312	319	349	375	390	144
165°	344	346	353	361	366	97
175°	360	358	357	355	352	34
180°	358	358	358	358	358	

TEST NUMBER: P521798

CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3036.1	3036.1	3036.1	3036.1	3036.1
2.5°	3043.6	3016.5	3023.3	3023.2	3014.8
5°	2986.8	2956.9	2976.2	2983.1	2993.5
7.5°	2876.0	2853.3	2888.5	2914.6	2935.7
10°	2789.7	2770.1	2815.0	2852.9	2880.3
12.5°	2689.5	2673.1	2728.7	2779.6	2815.2
15°	2525.9	2516.8	2584.5	2654.8	2700.4
17.5°	2350.8	2346.4	2424.1	2506.2	2564.5
20°	2231.5	2230.2	2315.4	2400.9	2468.6
22.5°	2111.0	2113.9	2203.5	2292.4	2369.5
25°	1930.4	1935.6	2035.6	2124.4	2218.1
27.5°	1763.3	1765.7	1869.1	1962.8	2062.8
30°	1649.3	1655.8	1757.2	1854.2	1958.4
32.5°	1535.3	1542.8	1642.1	1742.3	1848.6
35°	1364.2	1370.7	1462.8	1561.2	1671.9
37.5°	1187.8	1196.7	1278.4	1371.5	1480.4
40°	1073.8	1086.8	1159.0	1246.7	1353.5
42.5°	964.0	980.1	1047.1	1130.3	1226.7
45°	818.0	833.6	888.6	955.9	1043.1
47.5°	692.2	710.2	752.4	810.4	884.9
50°	620.8	637.7	676.8	719.7	790.0
52.5°	557.9	574.9	609.6	642.7	702.6
55°	470.3	489.8	518.2	537.9	582.2
57.5°	398.3	417.1	439.6	448.5	475.3
60°	350.4	371.2	391.7	390.7	405.0
62.5°	306.7	324.4	344.8	330.7	331.5
65°	235.8	255.3	278.4	243.3	221.1
67.5°	190.5	194.7	218.5	169.7	143.3
70°	169.2	169.2	175.9	131.4	109.2
72.5°	148.9	148.9	142.8	106.8	83.7
75°	118.6	118.6	107.9	74.1	50.6
77.5°	91.4	90.3	82.6	55.3	36.8
80°	73.3	73.3	66.6	43.6	29.3
82.5°	57.3	57.3	51.7	34.1	21.8
85°	33.3	33.3	30.6	19.8	12.0
87.5°	11.7	11.7	10.7	6.4	5.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.4	28.9	66.9	19.5	14.7
95°	17.7	70.2	315.6	109.3	67.3
97.5°	32.5	82.3	486.1	347.8	238.4
100°	42.9	89.4	523.1	529.9	408.2
102.5°	54.3	97.1	515.0	678.3	572.0
105°	72.1	109.4	472.8	835.1	793.9
107.5°	90.2	123.6	423.5	879.3	916.0
110°	102.7	134.0	395.2	862.4	944.9

TEST NUMBER: P521798

CATALOG NUMBER: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	114.7	144.4	376.2	822.4	940.0
115°	134.0	161.9	358.5	759.5	891.8
117.5°	151.0	177.2	348.0	690.7	830.9
120°	164.6	186.6	346.9	651.3	785.7
122.5°	175.5	197.5	344.2	616.8	741.6
125°	189.1	209.7	342.2	567.8	678.9
127.5°	203.9	223.2	341.1	538.5	630.1
130°	211.6	230.9	339.5	518.1	598.0
132.5°	219.7	238.5	339.5	502.2	575.6
135°	231.3	250.6	338.1	479.6	542.2
137.5°	242.2	260.9	338.0	460.5	514.6
140°	250.3	269.6	337.4	444.7	496.6
142.5°	259.6	275.7	339.0	432.1	478.6
145°	272.8	286.8	340.8	415.1	452.4
147.5°	284.1	297.6	343.8	398.0	430.2
150°	293.9	303.2	344.9	392.3	415.0
152.5°	301.5	311.3	346.0	384.7	405.7
155°	311.6	318.9	349.0	375.2	390.5
157.5°	324.1	328.5	349.7	370.9	381.8
160°	330.6	333.9	352.4	367.6	376.9
162.5°	334.4	338.3	352.9	364.8	372.0
165°	344.2	345.5	353.1	360.7	366.0
167.5°	350.9	349.7	356.2	359.6	361.8
170°	353.1	352.4	355.1	355.8	358.5
172.5°	358.0	355.7	356.7	354.7	356.9
175°	360.5	358.5	357.1	355.0	352.4
177.5°	361.6	358.4	356.7	354.6	355.1
180°	357.8	357.8	357.8	357.8	357.8

(END OF REPORT)