

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: P521954

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521954  
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-125D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 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: 8876.7 lumens  
Efficiency: N/A  
Efficacy: 100.6 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

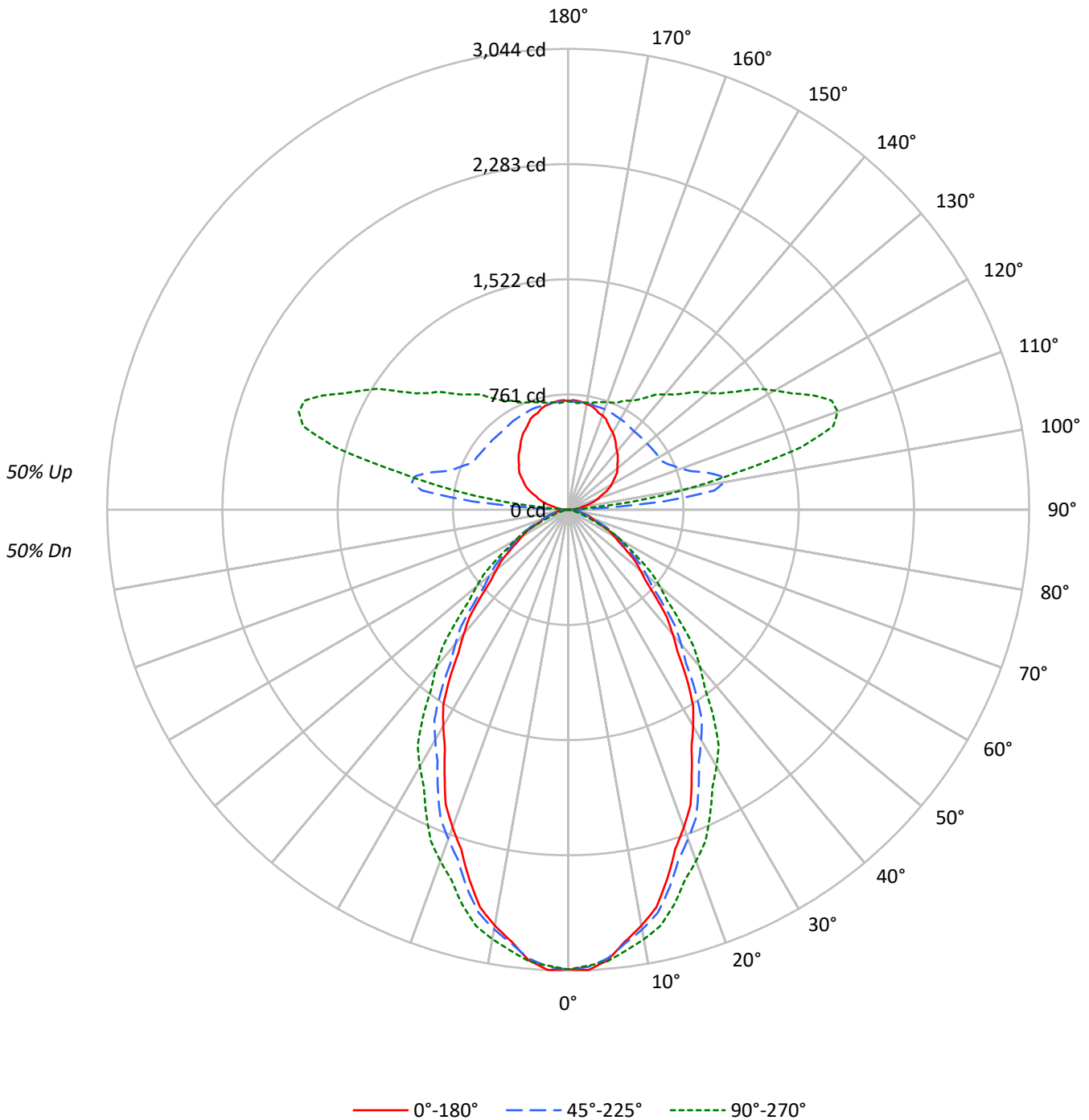
Input Watts (W): 88.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521954

CATALOG NUMBER: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_4000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521954

CATALOG NUMBER: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_4000K

**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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																				
1	99	95	92	88	91	88	85	82	75	73	71	62	61	60	51	50	49	44																				
2	91	84	79	74	84	78	73	69	67	63	60	56	54	52	47	45	43	39																				
3	84	75	69	63	77	70	64	60	60	56	52	51	48	45	42	40	38	34																				
4	77	67	60	55	71	63	56	52	54	49	46	46	43	40	39	36	34	31																				
5	71	61	53	48	66	57	50	45	49	44	40	42	38	35	35	33	31	28																				
6	66	55	47	42	61	51	45	40	45	40	36	39	35	32	33	30	28	25																				
7	62	50	43	37	57	47	40	36	41	36	32	35	32	29	30	27	25	23																				
8	57	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21																				
9	54	42	35	30	50	40	33	29	35	30	26	30	26	24	26	23	21	19																				
10	50	39	32	28	47	37	31	26	32	27	24	28	24	22	25	22	19	18																				

**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: P521954

CATALOG NUMBER: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.5	3.1
10°-20°	724.4	8.2
20°-30°	938.2	10.6
30°-40°	918.8	10.4
40°-50°	703.3	7.9
50°-60°	468.6	5.3
60°-70°	255.7	2.9
70°-80°	106.6	1.2
80°-90°	30.2	0.3
90°-100°	326.6	3.7
100°-110°	929.4	10.5
110°-120°	890.4	10.0
120°-130°	704.7	7.9
130°-140°	565.7	6.4
140°-150°	442.8	5.0
150°-160°	324.0	3.7
160°-170°	200.7	2.3
170°-180°	68.1	0.8
0°-30°	1941.1	21.9
0°-40°	2859.9	32.2
0°-60°	4031.7	45.4
0°-90°	4424.2	49.8
90°-120°	2146.4	24.2
90°-150°	3859.7	43.5
90°-180°	4453.0	50.2
0°-180°	8876.7	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	3
95°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

TEST NUMBER: P521954

CATALOG NUMBER: SQ4-WB-100U-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°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

TEST NUMBER: P521954

CATALOG NUMBER: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)