

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: P521951

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521951  
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\_2700K  
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 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8340.1 lumens  
Efficiency: N/A  
Efficacy: 94.9 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

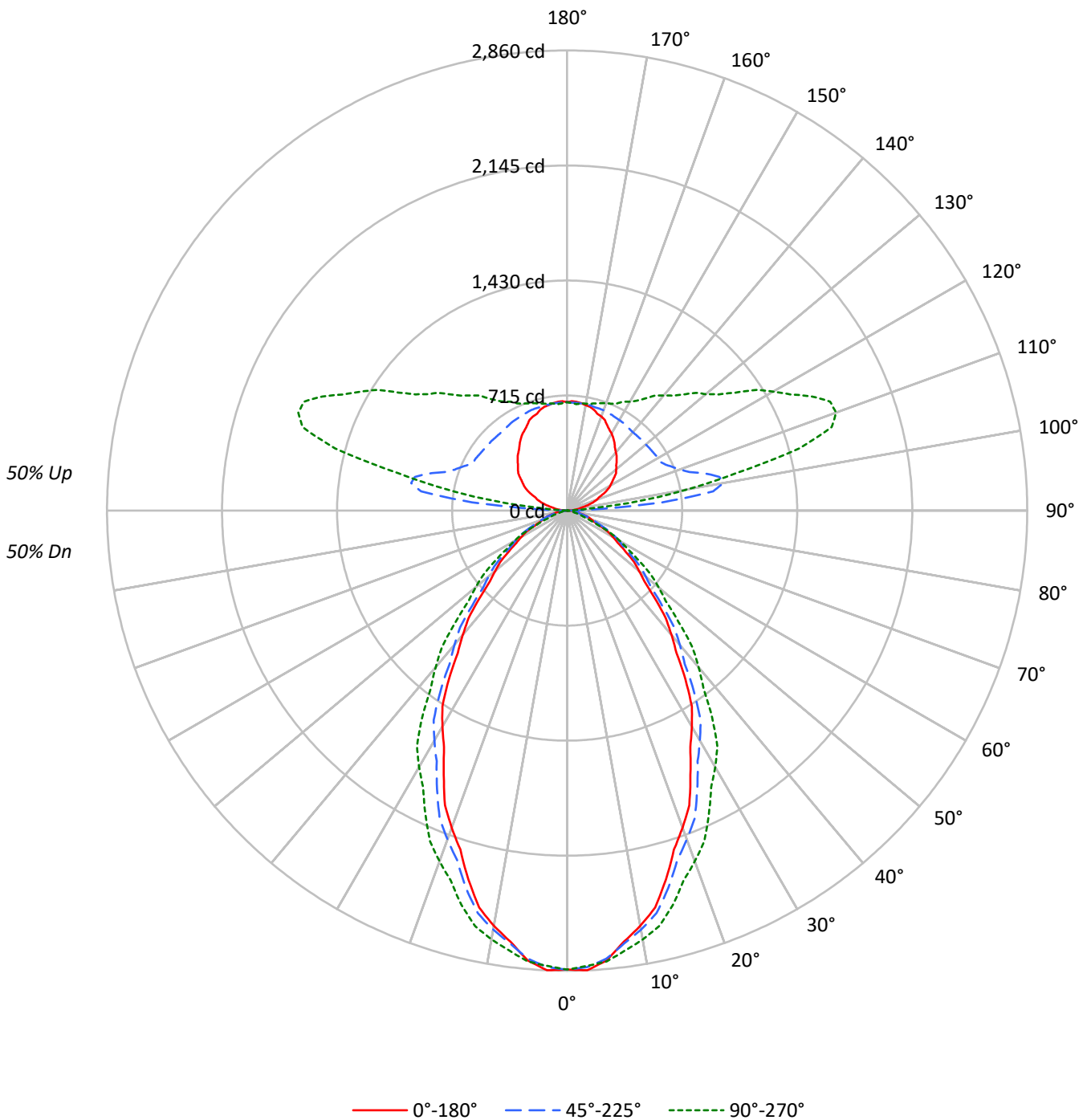
Input Watts (W): 87.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	26319	26319	26319
5°	25990	25898	26048
10°	24555	24778	25352
15°	22668	23194	24234
20°	20585	21359	22773
25°	18463	19470	21216
30°	16509	17589	19602
35°	14436	15480	17693
40°	12151	13116	15316
45°	10027	10894	12788
50°	8372	9127	10653
55°	7107	7832	8799
60°	6075	6790	7021
65°	4836	5711	4536
70°	4289	4456	2768
75°	3971	3615	1697
80°	3655	3326	1461
85°	3313	3049	1196

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12788 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.7	3.1
10°-20°	680.6	8.2
20°-30°	881.5	10.6
30°-40°	863.2	10.4
40°-50°	660.8	7.9
50°-60°	440.3	5.3
60°-70°	240.3	2.9
70°-80°	100.1	1.2
80°-90°	28.3	0.3
90°-100°	306.9	3.7
100°-110°	873.2	10.5
110°-120°	836.6	10.0
120°-130°	662.1	7.9
130°-140°	531.5	6.4
140°-150°	416.1	5.0
150°-160°	304.4	3.7
160°-170°	188.6	2.3
170°-180°	64.0	0.8
0°-30°	1823.7	21.9
0°-40°	2687.0	32.2
0°-60°	3788.0	45.4
0°-90°	4156.8	49.8
90°-120°	2016.7	24.2
90°-150°	3626.3	43.5
90°-180°	4183.0	50.2
0°-180°	8340.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2853	2853	2853	2853	2853	
5°	2806	2778	2796	2803	2812	261
15°	2373	2365	2428	2494	2537	663
25°	1814	1819	1913	1996	2084	834
35°	1282	1288	1374	1467	1571	797
45°	768	783	835	898	980	599
55°	442	460	487	505	547	401
65°	222	240	262	229	208	230
75°	111	111	101	70	48	119
85°	31	31	29	19	11	34
90°	0	0	0	0	0	3
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2852.6	2852.6	2852.6	2852.6	2852.6
2.5°	2859.6	2834.1	2840.6	2840.4	2832.6
5°	2806.3	2778.1	2796.3	2802.7	2812.5
7.5°	2702.1	2680.8	2713.9	2738.4	2758.2
10°	2621.0	2602.7	2644.8	2680.4	2706.1
12.5°	2526.9	2511.5	2563.7	2611.5	2645.1
15°	2373.2	2364.6	2428.3	2494.3	2537.2
17.5°	2208.7	2204.6	2277.6	2354.7	2409.5
20°	2096.6	2095.4	2175.4	2255.7	2319.4
22.5°	1983.4	1986.1	2070.3	2153.8	2226.2
25°	1813.7	1818.6	1912.6	1995.9	2084.1
27.5°	1656.7	1658.9	1756.1	1844.1	1938.1
30°	1549.6	1555.7	1651.0	1742.1	1840.0
32.5°	1442.4	1449.5	1542.8	1637.0	1736.8
35°	1281.7	1287.8	1374.4	1466.8	1570.9
37.5°	1116.0	1124.3	1201.1	1288.6	1390.9
40°	1008.9	1021.1	1089.0	1171.4	1271.7
42.5°	905.7	920.9	983.8	1062.0	1152.6
45°	768.5	783.2	834.9	898.1	980.1
47.5°	650.4	667.3	707.0	761.4	831.4
50°	583.3	599.2	635.9	676.2	742.2
52.5°	524.2	540.1	572.8	603.8	660.1
55°	441.8	460.2	486.9	505.4	547.0
57.5°	374.3	391.9	413.1	421.4	446.6
60°	329.2	348.8	368.0	367.1	380.5
62.5°	288.1	304.8	323.9	310.7	311.4
65°	221.5	239.9	261.6	228.6	207.8
67.5°	179.0	182.9	205.3	159.4	134.7
70°	159.0	159.0	165.2	123.4	102.6
72.5°	139.9	139.9	134.2	100.4	78.6
75°	111.4	111.4	101.4	69.6	47.6
77.5°	85.9	84.9	77.6	51.9	34.5
80°	68.8	68.8	62.6	41.0	27.5
82.5°	53.8	53.8	48.6	32.0	20.5
85°	31.3	31.3	28.8	18.6	11.3
87.5°	11.0	11.0	10.0	6.0	5.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)