

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: P521953

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521953  
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\_3500K  
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 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8717.3 lumens  
Efficiency: N/A  
Efficacy: 98.8 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: General Diffuse

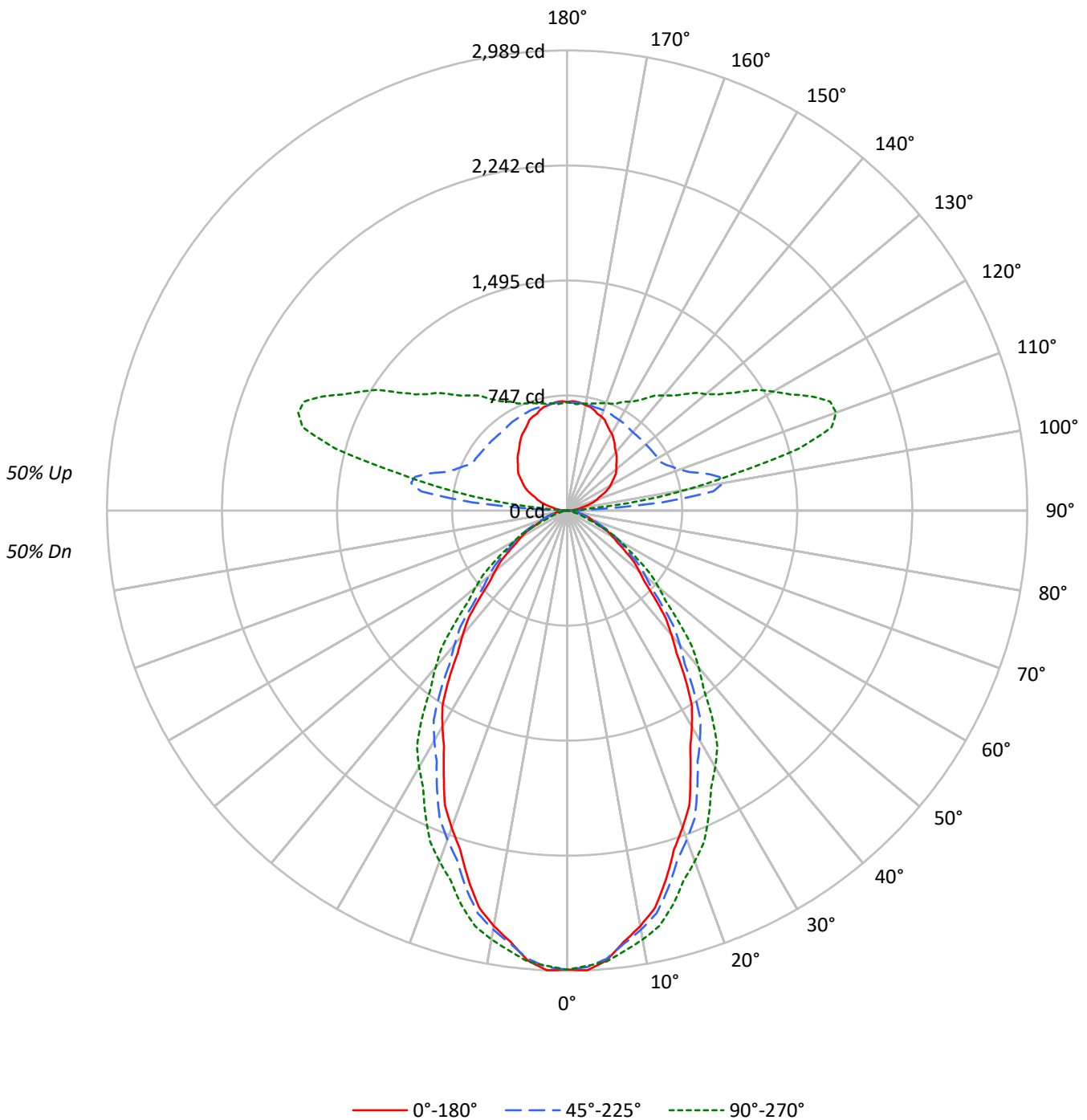
Input Watts (W): 88.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**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	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°	27509	27509	27509
5°	27166	27068	27226
10°	25666	25898	26499
15°	23693	24243	25330
20°	21516	22325	23803
25°	19298	20351	22175
30°	17255	18384	20489
35°	15089	16179	18493
40°	12700	13708	16009
45°	10481	11386	13366
50°	8751	9539	11135
55°	7428	8186	9196
60°	6349	7097	7339
65°	5056	5969	4742
70°	4483	4659	2894
75°	4149	3779	1772
80°	3825	3475	1530
85°	3462	3186	1249

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13366 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.5	3.1
10°-20°	711.3	8.2
20°-30°	921.4	10.6
30°-40°	902.3	10.4
40°-50°	690.6	7.9
50°-60°	460.2	5.3
60°-70°	251.1	2.9
70°-80°	104.6	1.2
80°-90°	29.6	0.3
90°-100°	320.7	3.7
100°-110°	912.7	10.5
110°-120°	874.4	10.0
120°-130°	692.1	7.9
130°-140°	555.5	6.4
140°-150°	434.9	5.0
150°-160°	318.2	3.7
160°-170°	197.1	2.3
170°-180°	66.9	0.8
0°-30°	1906.2	21.9
0°-40°	2808.5	32.2
0°-60°	3959.3	45.4
0°-90°	4344.7	49.8
90°-120°	2107.9	24.2
90°-150°	3790.4	43.5
90°-180°	4373.0	50.2
0°-180°	8717.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2982	2982	2982	2982	2982	
5°	2933	2904	2923	2930	2940	273
15°	2480	2472	2538	2607	2652	693
25°	1896	1901	1999	2086	2178	872
35°	1340	1346	1436	1533	1642	833
45°	803	819	873	939	1024	626
55°	462	481	509	528	572	419
65°	232	251	273	239	217	241
75°	116	116	106	73	50	124
85°	33	33	30	19	12	36
90°	0	0	0	0	0	3
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2981.6	2981.6	2981.6	2981.6	2981.6
2.5°	2988.9	2962.3	2969.0	2968.8	2960.7
5°	2933.2	2903.8	2922.7	2929.5	2939.7
7.5°	2824.3	2802.1	2836.6	2862.2	2882.9
10°	2739.6	2720.4	2764.4	2801.7	2828.5
12.5°	2641.2	2625.0	2679.6	2729.6	2764.7
15°	2480.5	2471.6	2538.1	2607.1	2651.9
17.5°	2308.6	2304.3	2380.6	2461.1	2518.5
20°	2191.4	2190.1	2273.8	2357.7	2424.3
22.5°	2073.1	2075.9	2163.9	2251.2	2326.9
25°	1895.7	1900.8	1999.1	2086.2	2178.3
27.5°	1731.6	1733.9	1835.5	1927.5	2025.7
30°	1619.7	1626.1	1725.6	1820.8	1923.2
32.5°	1507.7	1515.1	1612.6	1711.0	1815.4
35°	1339.7	1346.1	1436.5	1533.2	1641.9
37.5°	1166.5	1175.2	1255.4	1346.8	1453.8
40°	1054.5	1067.3	1138.2	1224.3	1329.2
42.5°	946.7	962.5	1028.3	1110.0	1204.7
45°	803.3	818.6	872.6	938.7	1024.4
47.5°	679.8	697.4	738.9	795.8	869.0
50°	609.7	626.3	664.6	706.7	775.8
52.5°	547.9	564.5	598.7	631.1	690.0
55°	461.8	481.0	508.9	528.2	571.7
57.5°	391.2	409.6	431.7	440.4	466.8
60°	344.1	364.5	384.6	383.6	397.7
62.5°	301.2	318.6	338.6	324.7	325.5
65°	231.6	250.8	273.4	238.9	217.2
67.5°	187.1	191.2	214.6	166.6	140.8
70°	166.2	166.2	172.7	129.0	107.3
72.5°	146.3	146.3	140.2	104.9	82.2
75°	116.4	116.4	106.0	72.7	49.7
77.5°	89.7	88.7	81.1	54.3	36.1
80°	72.0	72.0	65.4	42.9	28.8
82.5°	56.3	56.3	50.8	33.5	21.5
85°	32.7	32.7	30.1	19.4	11.8
87.5°	11.5	11.5	10.5	6.3	5.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)