

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: P521952

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521952  
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\_3000K  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8512.9 lumens  
Efficiency: N/A  
Efficacy: 96.6 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

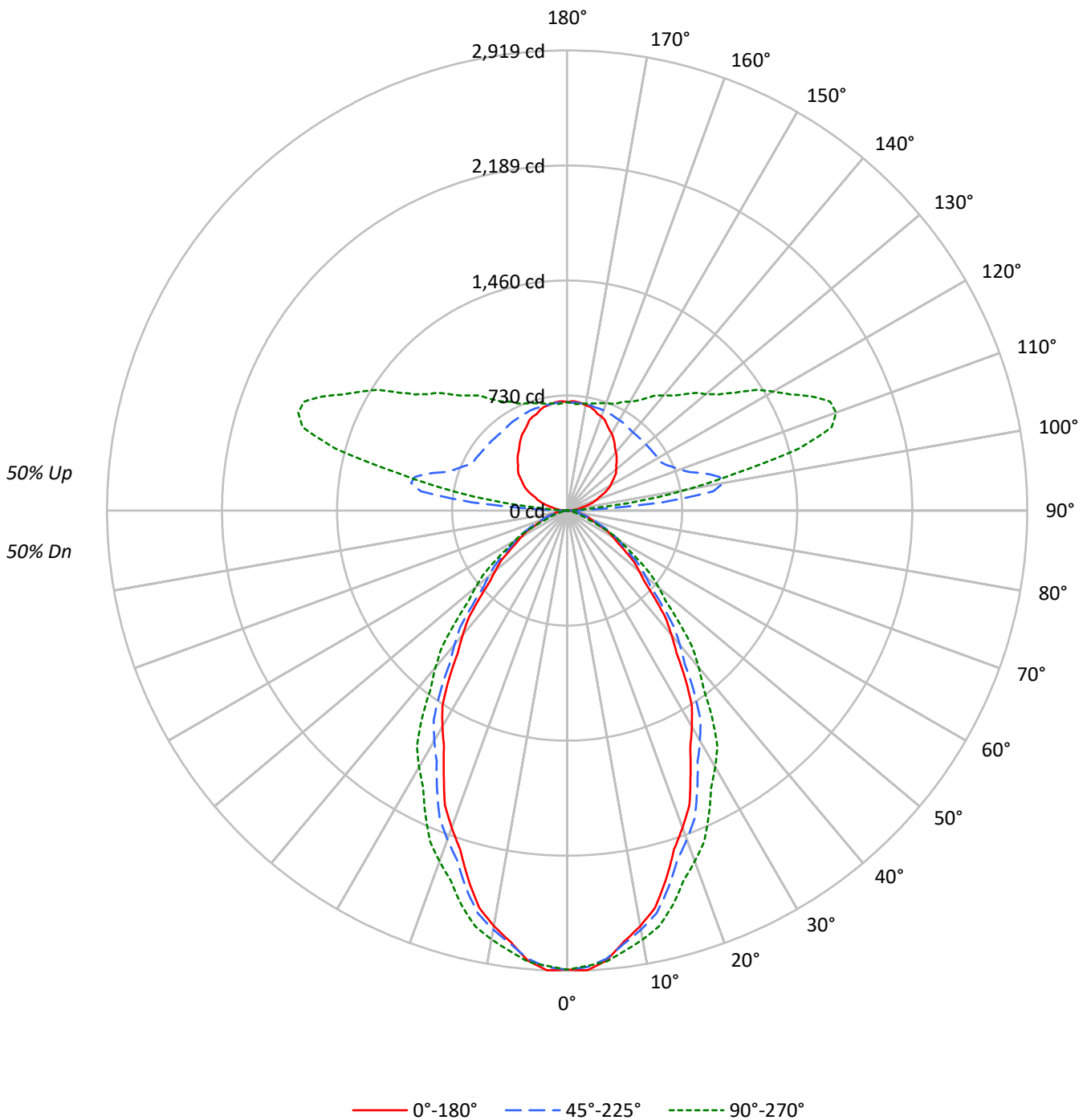
Input Watts (W): 88.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	26864	26864	26864
5°	26528	26434	26588
10°	25065	25291	25878
15°	23138	23675	24737
20°	21011	21802	23244
25°	18846	19873	21656
30°	16851	17953	20008
35°	14736	15800	18059
40°	12403	13387	15634
45°	10236	11119	13053
50°	8546	9315	10874
55°	7255	7994	8980
60°	6200	6931	7167
65°	4936	5829	4630
70°	4378	4548	2827
75°	4053	3689	1729
80°	3735	3395	1493
85°	3377	3112	1217

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13053 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.1	3.1
10°-20°	694.7	8.2
20°-30°	899.8	10.6
30°-40°	881.1	10.4
40°-50°	674.5	7.9
50°-60°	449.4	5.3
60°-70°	245.2	2.9
70°-80°	102.2	1.2
80°-90°	28.9	0.3
90°-100°	313.2	3.7
100°-110°	891.3	10.5
110°-120°	853.9	10.0
120°-130°	675.9	7.9
130°-140°	542.5	6.4
140°-150°	424.7	5.0
150°-160°	310.7	3.7
160°-170°	192.5	2.3
170°-180°	65.3	0.8
0°-30°	1861.5	21.9
0°-40°	2742.7	32.2
0°-60°	3866.5	45.4
0°-90°	4242.9	49.8
90°-120°	2058.5	24.2
90°-150°	3701.5	43.5
90°-180°	4270.0	50.2
0°-180°	8512.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2912	2912	2912	2912	2912	
5°	2864	2836	2854	2861	2871	266
15°	2422	2414	2479	2546	2590	676
25°	1851	1856	1952	2037	2127	851
35°	1308	1314	1403	1497	1603	813
45°	784	800	852	917	1000	612
55°	451	470	497	516	558	409
65°	226	245	267	233	212	235
75°	114	114	104	71	48	121
85°	32	32	29	19	12	35
90°	0	0	0	0	0	3
95°	34	135	606	210	129	39
105°	138	210	908	1604	1525	147
115°	258	311	689	1459	1713	253
125°	363	403	657	1091	1304	325
135°	444	481	650	922	1042	343
145°	524	551	655	798	869	327
155°	599	613	670	721	750	277
165°	661	664	678	693	703	186
175°	693	689	686	682	677	66
180°	687	687	687	687	687	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2911.7	2911.7	2911.7	2911.7	2911.7
2.5°	2918.9	2892.9	2899.4	2899.3	2891.3
5°	2864.4	2835.7	2854.2	2860.8	2870.8
7.5°	2758.1	2736.4	2770.2	2795.1	2815.4
10°	2675.4	2656.6	2699.6	2736.0	2762.2
12.5°	2579.3	2563.5	2616.8	2665.7	2699.9
15°	2422.4	2413.6	2478.6	2546.0	2589.8
17.5°	2254.5	2250.3	2324.8	2403.5	2459.4
20°	2140.0	2138.8	2220.5	2302.5	2367.4
22.5°	2024.5	2027.3	2113.2	2198.4	2272.4
25°	1851.3	1856.3	1952.2	2037.3	2127.3
27.5°	1691.1	1693.3	1792.5	1882.3	1978.3
30°	1581.7	1587.9	1685.2	1778.2	1878.1
32.5°	1472.3	1479.6	1574.8	1670.9	1772.8
35°	1308.3	1314.5	1402.8	1497.2	1603.4
37.5°	1139.1	1147.6	1226.0	1315.3	1419.7
40°	1029.8	1042.3	1111.5	1195.6	1298.1
42.5°	924.5	940.0	1004.2	1084.0	1176.4
45°	784.5	799.5	852.2	916.7	1000.4
47.5°	663.9	681.1	721.6	777.1	848.6
50°	595.4	611.6	649.0	690.2	757.6
52.5°	535.1	551.3	584.6	616.4	673.8
55°	451.0	469.7	497.0	515.8	558.3
57.5°	382.0	400.0	421.6	430.1	455.9
60°	336.0	356.0	375.6	374.7	388.4
62.5°	294.1	311.1	330.7	317.1	317.9
65°	226.1	244.9	267.0	233.3	212.1
67.5°	182.7	186.7	209.5	162.7	137.5
70°	162.3	162.3	168.6	126.0	104.8
72.5°	142.8	142.8	137.0	102.5	80.2
75°	113.7	113.7	103.5	71.0	48.5
77.5°	87.6	86.6	79.2	53.0	35.3
80°	70.3	70.3	63.9	41.8	28.1
82.5°	54.9	54.9	49.6	32.7	21.0
85°	31.9	31.9	29.4	19.0	11.5
87.5°	11.2	11.2	10.2	6.1	5.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	55.4	128.6	37.4	28.2
95°	34.0	134.9	606.4	209.9	129.4
97.5°	62.5	158.1	933.9	668.3	457.9
100°	82.3	171.8	1005.0	1018.0	784.1
102.5°	104.3	186.6	989.3	1303.0	1098.8
105°	138.5	210.1	908.3	1604.4	1525.1
107.5°	173.3	237.4	813.7	1689.3	1759.9
110°	197.3	257.4	759.3	1656.8	1815.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	220.3	277.3	722.7	1579.9	1805.9
115°	257.5	311.1	688.7	1459.0	1713.3
117.5°	290.1	340.5	668.6	1326.9	1596.2
120°	316.3	358.4	666.5	1251.3	1509.5
122.5°	337.2	379.3	661.3	1185.0	1424.8
125°	363.3	402.9	657.4	1090.9	1304.3
127.5°	391.8	428.9	655.3	1034.6	1210.4
130°	406.4	443.5	652.1	995.4	1148.8
132.5°	422.1	458.2	652.1	964.8	1105.9
135°	444.3	481.4	649.5	921.5	1041.6
137.5°	465.3	501.3	649.3	884.8	988.5
140°	480.9	518.0	648.2	854.4	954.0
142.5°	498.7	529.6	651.4	830.1	919.5
145°	524.1	550.9	654.8	797.5	869.1
147.5°	545.8	571.8	660.5	764.6	826.5
150°	564.6	582.5	662.6	753.8	797.2
152.5°	579.2	598.1	664.7	739.0	779.4
155°	598.6	612.6	670.4	720.8	750.2
157.5°	622.6	631.0	671.7	712.5	733.4
160°	635.1	641.5	677.0	706.1	724.0
162.5°	642.5	649.9	678.0	700.8	714.6
165°	661.3	663.8	678.3	692.9	703.1
167.5°	674.1	671.8	684.3	690.9	695.0
170°	678.3	677.0	682.2	683.6	688.7
172.5°	687.7	683.3	685.3	681.5	685.6
175°	692.7	688.8	686.1	682.1	677.0
177.5°	694.7	688.6	685.3	681.2	682.2
180°	687.4	687.4	687.4	687.4	687.4

(END OF REPORT)