

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: P521939

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521939  
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-100D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 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: 7621.3 lumens  
Efficiency: N/A  
Efficacy: 101.9 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

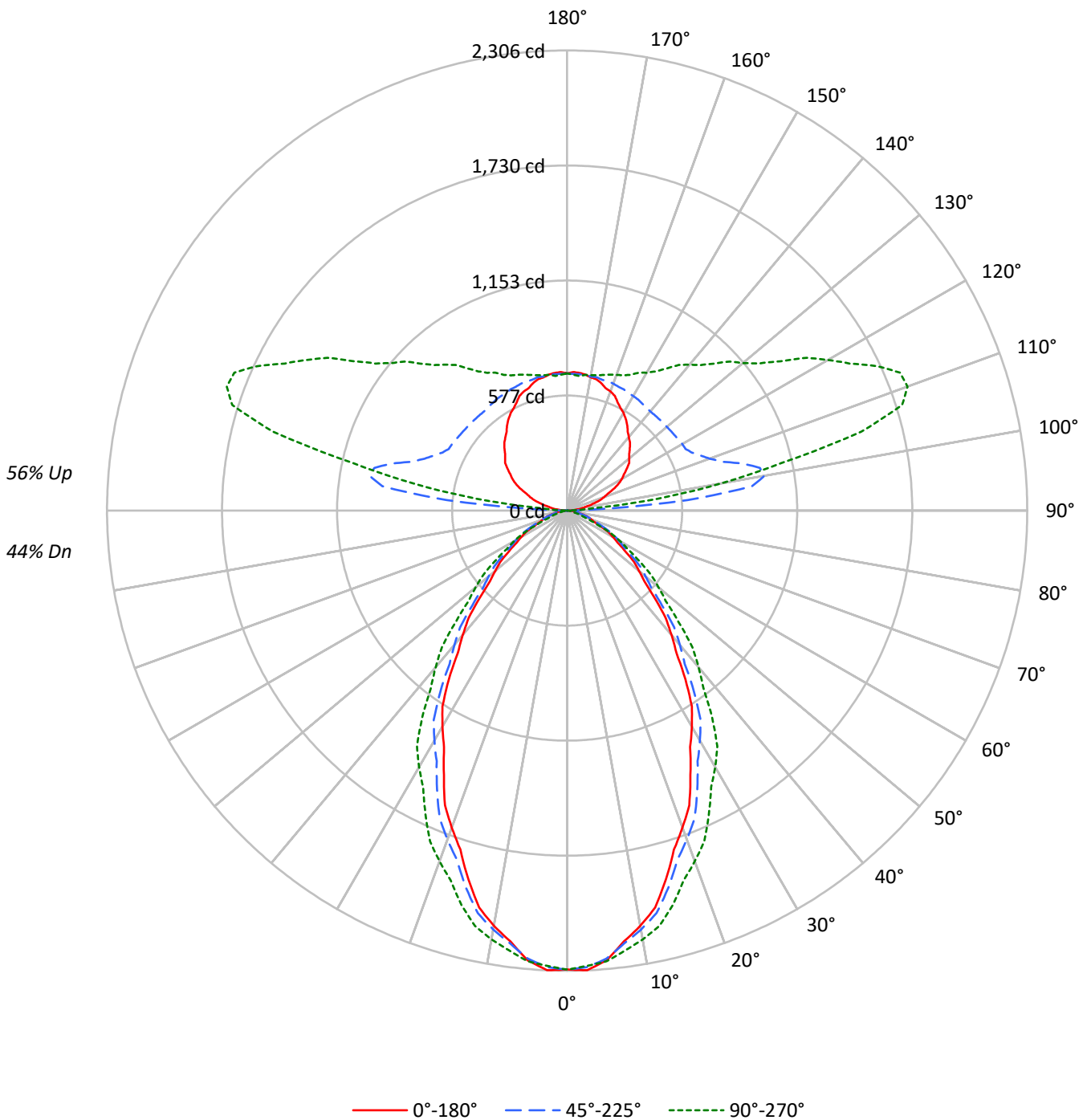
Input Watts (W): 74.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	97	94	90	87	89	86	83	80	72	70	68	58	57	56	46	45	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	39	34				
3	82	74	67	62	75	68	62	58	57	53	50	47	44	42	38	36	35	30				
4	76	66	59	53	69	61	55	50	52	47	43	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	48	44	47	42	38	39	36	33	32	30	28	24				
6	65	54	46	41	60	50	43	38	43	38	34	36	32	29	29	27	25	22				
7	60	49	41	36	55	45	39	34	39	34	30	33	29	26	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	30	27	24	25	23	21	18				
9	52	41	34	29	48	38	32	28	33	28	25	28	24	22	24	21	19	17				
10	49	38	31	26	45	35	29	25	31	26	23	26	23	20	22	19	17	15				

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

	0°	45°	90°
0°	21218	21218	21218
5°	20954	20879	21000
10°	19797	19977	20439
15°	18275	18699	19538
20°	16596	17220	18359
25°	14885	15697	17104
30°	13309	14180	15803
35°	11638	12480	14265
40°	9797	10573	12349
45°	8084	8782	10309
50°	6750	7358	8589
55°	5730	6315	7094
60°	4897	5475	5661
65°	3899	4604	3657
70°	3458	3593	2231
75°	3201	2912	1365
80°	2949	2683	1180
85°	2668	2456	963

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10309 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.9	2.8
10°-20°	548.7	7.2
20°-30°	710.7	9.3
30°-40°	696.0	9.1
40°-50°	532.7	7.0
50°-60°	355.0	4.7
60°-70°	193.7	2.5
70°-80°	80.7	1.1
80°-90°	22.9	0.3
90°-100°	313.2	4.1
100°-110°	891.3	11.7
110°-120°	853.9	11.2
120°-130°	675.9	8.9
130°-140°	542.5	7.1
140°-150°	424.7	5.6
150°-160°	310.7	4.1
160°-170°	192.5	2.5
170°-180°	65.3	0.9
0°-30°	1470.3	19.3
0°-40°	2166.3	28.4
0°-60°	3054.0	40.1
0°-90°	3351.2	44.0
90°-120°	2058.5	27.0
90°-150°	3701.5	48.6
90°-180°	4270.0	56.0
0°-180°	7621.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2300	2300	2300	2300	2300	
5°	2262	2240	2254	2260	2268	210
15°	1913	1906	1958	2011	2046	534
25°	1462	1466	1542	1609	1680	672
35°	1033	1038	1108	1183	1266	642
45°	620	631	673	724	790	483
55°	356	371	393	407	441	323
65°	179	193	211	184	168	186
75°	90	90	82	56	38	96
85°	25	25	23	15	9	27
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°	2299.8	2299.8	2299.8	2299.8	2299.8
2.5°	2305.5	2284.9	2290.1	2290.0	2283.7
5°	2262.5	2239.8	2254.4	2259.6	2267.5
7.5°	2178.5	2161.3	2188.0	2207.7	2223.7
10°	2113.1	2098.3	2132.3	2161.0	2181.7
12.5°	2037.2	2024.8	2066.9	2105.5	2132.5
15°	1913.3	1906.4	1957.7	2011.0	2045.5
17.5°	1780.7	1777.4	1836.2	1898.4	1942.6
20°	1690.3	1689.3	1753.9	1818.6	1869.9
22.5°	1599.1	1601.2	1669.1	1736.4	1794.8
25°	1462.2	1466.2	1541.9	1609.2	1680.2
27.5°	1335.7	1337.5	1415.8	1486.8	1562.5
30°	1249.3	1254.2	1331.0	1404.5	1483.4
32.5°	1162.9	1168.6	1243.9	1319.8	1400.3
35°	1033.3	1038.3	1108.0	1182.6	1266.5
37.5°	899.7	906.4	968.4	1038.9	1121.3
40°	813.4	823.2	877.9	944.4	1025.3
42.5°	730.2	742.4	793.2	856.2	929.2
45°	619.6	631.4	673.1	724.0	790.1
47.5°	524.3	538.0	570.0	613.8	670.3
50°	470.3	483.1	512.6	545.1	598.4
52.5°	422.6	435.4	461.8	486.8	532.2
55°	356.2	371.0	392.6	407.4	441.0
57.5°	301.7	315.9	333.0	339.7	360.1
60°	265.4	281.2	296.7	295.9	306.8
62.5°	232.3	245.7	261.2	250.5	251.1
65°	178.6	193.4	210.9	184.3	167.5
67.5°	144.3	147.5	165.5	128.5	108.6
70°	128.2	128.2	133.2	99.5	82.7
72.5°	112.8	112.8	108.2	80.9	63.4
75°	89.8	89.8	81.7	56.1	38.3
77.5°	69.2	68.4	62.6	41.9	27.9
80°	55.5	55.5	50.5	33.1	22.2
82.5°	43.4	43.4	39.2	25.8	16.5
85°	25.2	25.2	23.2	15.0	9.1
87.5°	8.9	8.9	8.1	4.8	4.0
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)