

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: P521929

Luminaire Tested: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521929  
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-075D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7225.4 lumens  
Efficiency: N/A  
Efficacy: 112.4 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: Semi-Indirect

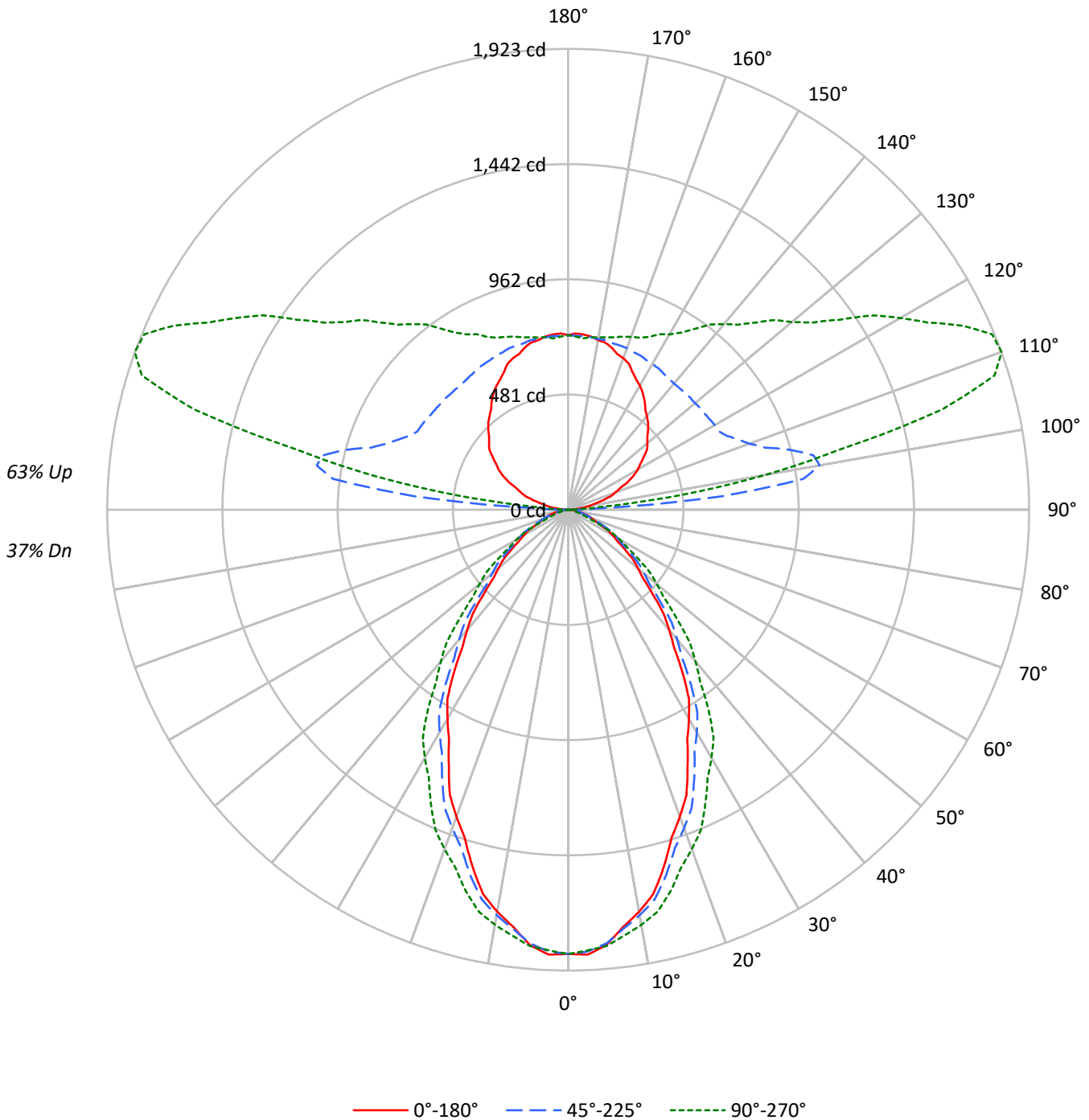
Input Watts (W): 64.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				
1	96	92	88	85	87	84	81	78	68	66	64	54	53	51	41	40	39	33				
2	88	81	76	71	80	74	69	65	61	57	55	48	46	44	37	36	34	29				
3	81	72	66	60	73	66	60	56	54	50	47	44	41	39	33	32	30	26				
4	74	64	57	52	67	59	53	48	49	44	41	39	36	34	31	29	27	23				
5	69	58	50	45	62	53	47	42	44	39	36	36	32	30	28	26	24	21				
6	63	52	45	39	58	48	42	37	40	35	32	33	29	27	26	23	22	19				
7	59	47	40	35	53	44	37	33	37	32	28	30	27	24	24	21	20	17				
8	55	43	36	31	50	40	34	29	34	29	25	28	24	22	22	20	18	16				
9	51	40	33	28	47	37	30	26	31	26	23	26	22	20	21	18	16	14				
10	48	36	30	25	44	34	28	24	29	24	21	24	20	18	19	17	15	13				

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

	0°	45°	90°
0°	17103	17103	17103
5°	16889	16828	16926
10°	15956	16101	16475
15°	14730	15072	15748
20°	13376	13879	14798
25°	11998	12652	13786
30°	10727	11429	12737
35°	9381	10059	11497
40°	7896	8522	9953
45°	6516	7078	8310
50°	5440	5931	6923
55°	4618	5089	5717
60°	3947	4412	4563
65°	3144	3711	2947
70°	2787	2897	1799
75°	2581	2349	1102
80°	2375	2162	951
85°	2149	1980	773

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8310 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.0	2.4
10°-20°	442.2	6.1
20°-30°	572.8	7.9
30°-40°	560.9	7.8
40°-50°	429.4	5.9
50°-60°	286.1	4.0
60°-70°	156.1	2.2
70°-80°	65.0	0.9
80°-90°	18.4	0.3
90°-100°	331.9	4.6
100°-110°	944.4	13.1
110°-120°	904.8	12.5
120°-130°	716.1	9.9
130°-140°	574.8	8.0
140°-150°	450.0	6.2
150°-160°	329.3	4.6
160°-170°	203.9	2.8
170°-180°	69.2	1.0
0°-30°	1185.1	16.4
0°-40°	1746.0	24.2
0°-60°	2461.5	34.1
0°-90°	2701.1	37.4
90°-120°	2181.1	30.2
90°-150°	3921.9	54.3
90°-180°	4524.0	62.6
0°-180°	7225.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1824	1805	1817	1821	1828	170
15°	1542	1537	1578	1621	1649	431
25°	1179	1182	1243	1297	1354	542
35°	833	837	893	953	1021	518
45°	499	509	542	584	637	389
55°	287	299	316	328	355	260
65°	144	156	170	148	135	150
75°	72	72	66	45	31	77
85°	20	20	19	12	7	22
90°	0	0	0	0	0	3
95°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1853.7	1853.7	1853.7	1853.7	1853.7
2.5°	1858.2	1841.7	1845.8	1845.7	1840.6
5°	1823.6	1805.3	1817.0	1821.3	1827.6
7.5°	1755.9	1742.0	1763.5	1779.4	1792.3
10°	1703.2	1691.2	1718.6	1741.8	1758.5
12.5°	1642.0	1632.0	1665.9	1697.0	1718.8
15°	1542.1	1536.6	1577.9	1620.8	1648.7
17.5°	1435.3	1432.6	1480.0	1530.1	1565.7
20°	1362.4	1361.6	1413.6	1465.8	1507.2
22.5°	1288.9	1290.6	1345.3	1399.6	1446.6
25°	1178.6	1181.7	1242.8	1297.0	1354.2
27.5°	1076.6	1078.0	1141.1	1198.3	1259.4
30°	1006.9	1010.9	1072.8	1132.0	1195.6
32.5°	937.3	941.9	1002.5	1063.7	1128.6
35°	832.9	836.9	893.1	953.2	1020.8
37.5°	725.2	730.6	780.5	837.3	903.8
40°	655.6	663.5	707.6	761.2	826.4
42.5°	588.5	598.4	639.3	690.1	748.9
45°	499.4	508.9	542.5	583.6	636.9
47.5°	422.6	433.6	459.4	494.7	540.2
50°	379.0	389.4	413.2	439.4	482.3
52.5°	340.6	351.0	372.2	392.4	429.0
55°	287.1	299.0	316.4	328.4	355.4
57.5°	243.2	254.6	268.4	273.8	290.2
60°	213.9	226.6	239.1	238.5	247.3
62.5°	187.2	198.1	210.5	201.9	202.4
65°	144.0	155.9	170.0	148.5	135.0
67.5°	116.3	118.9	133.4	103.6	87.5
70°	103.3	103.3	107.4	80.2	66.7
72.5°	90.9	90.9	87.2	65.2	51.1
75°	72.4	72.4	65.9	45.2	30.9
77.5°	55.8	55.2	50.4	33.7	22.4
80°	44.7	44.7	40.7	26.6	17.9
82.5°	35.0	35.0	31.6	20.8	13.3
85°	20.3	20.3	18.7	12.1	7.3
87.5°	7.2	7.2	6.5	3.9	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)