

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: P521423

Luminaire Tested: SQ4-F-050U-100D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521423  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-100D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

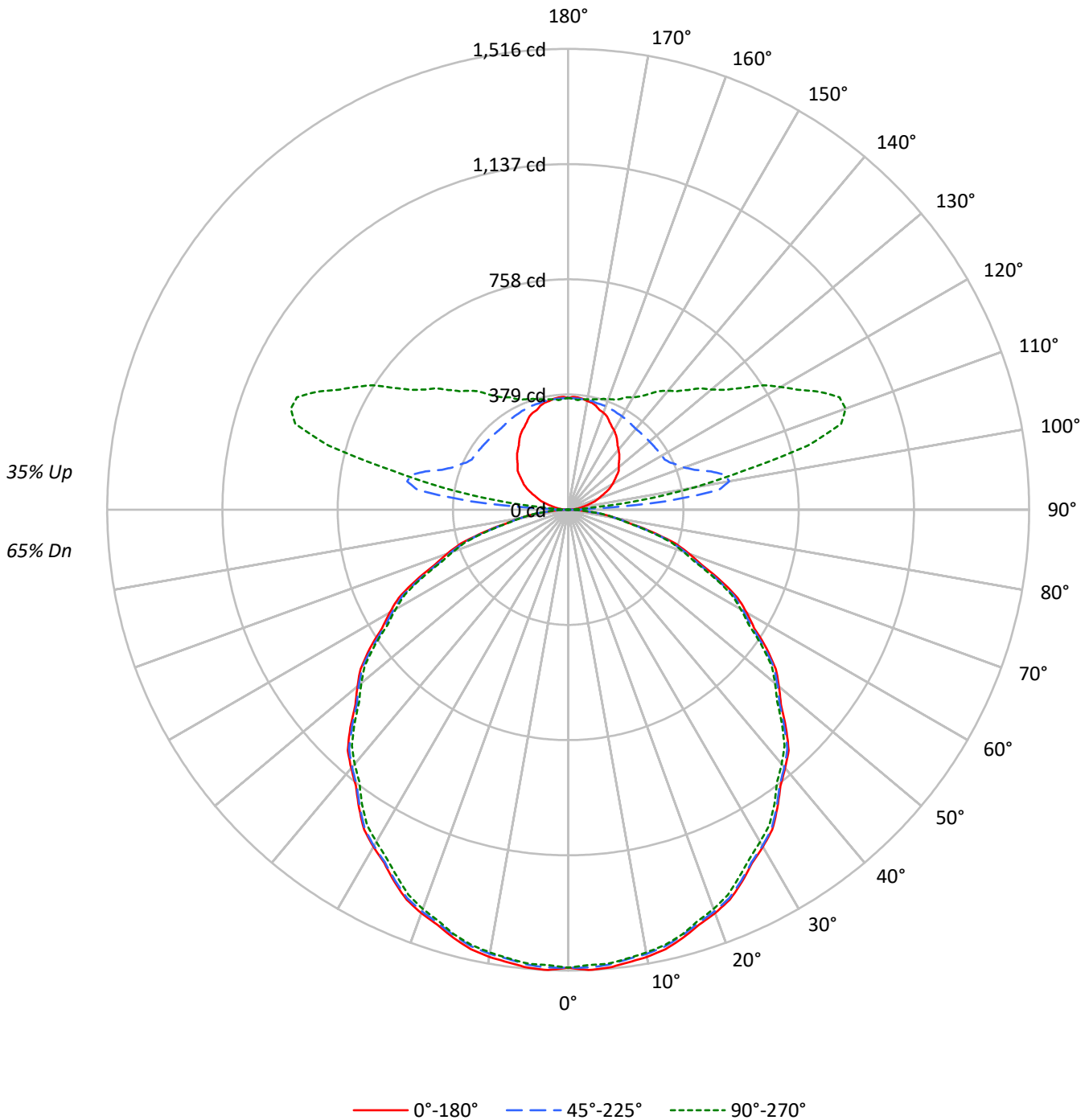
Lumens per Lamp: N/A  
Luminaire Lumens: 6578.4 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 58.1  
Input Voltage (V): 120  
Input Current (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			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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	92	89	95	91	87	84	80	78	75	71	69	67	62	60	59	55
2	92	84	78	72	86	79	74	69	70	66	62	62	58	55	54	52	49	45
3	84	74	66	60	78	70	63	57	62	56	52	54	50	47	48	44	42	38
4	76	65	57	51	72	62	54	48	55	49	44	48	44	40	43	39	36	33
5	70	58	50	43	66	55	47	41	49	43	38	43	38	34	38	34	31	28
6	65	52	44	38	61	49	42	36	44	38	33	39	34	30	35	30	27	25
7	60	47	39	33	56	45	37	32	40	34	29	36	30	27	32	27	24	22
8	56	43	35	29	52	41	33	28	36	30	26	33	27	24	29	25	22	19
9	52	39	31	26	49	37	30	25	33	27	23	30	25	21	27	22	19	17
10	48	36	28	23	45	34	27	23	31	25	21	28	23	19	25	21	18	16

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

	0°	45°	90°
0°	13899	13899	13899
5°	14011	13923	13885
10°	13996	13898	13859
15°	13930	13850	13820
20°	13866	13805	13723
25°	13759	13706	13558
30°	13642	13609	13442
35°	13503	13456	13315
40°	13369	13318	13154
45°	13214	13104	12954
50°	12988	12899	12749
55°	12806	12621	12469
60°	12509	12258	12084
65°	12105	11763	11579
70°	11403	11036	10836
75°	10291	10031	9881
80°	8506	8506	8395
85°	5981	6870	7093

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13214 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.6	2.2
10°-20°	408.6	6.2
20°-30°	617.8	9.4
30°-40°	744.0	11.3
40°-50°	772.7	11.7
50°-60°	700.4	10.6
60°-70°	533.4	8.1
70°-80°	298.0	4.5
80°-90°	77.3	1.2
90°-100°	167.5	2.5
100°-110°	476.6	7.2
110°-120°	456.7	6.9
120°-130°	361.4	5.5
130°-140°	290.1	4.4
140°-150°	227.1	3.5
150°-160°	166.2	2.5
160°-170°	102.9	1.6
170°-180°	34.9	0.5
0°-30°	1169.0	17.8
0°-40°	1913.0	29.1
0°-60°	3386.1	51.5
0°-90°	4294.9	65.3
90°-120°	1100.8	16.7
90°-150°	1979.5	30.1
90°-180°	2283.0	34.7
0°-180°	6578.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1513	1498	1503	1499	1499	144
15°	1458	1445	1450	1447	1447	411
25°	1352	1340	1346	1336	1332	623
35°	1199	1192	1195	1183	1182	750
45°	1013	1007	1004	994	993	780
55°	796	793	785	775	775	710
65°	554	548	539	531	530	547
75°	289	285	281	277	277	306
85°	56	61	65	66	67	71
90°	0	0	0	0	0	3
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1506.5	1506.5	1506.5	1506.5	1506.5
2.5°	1515.7	1503.4	1507.3	1504.7	1499.8
5°	1512.8	1498.4	1503.3	1499.2	1499.2
7.5°	1502.3	1488.6	1491.8	1489.3	1489.3
10°	1493.9	1478.6	1483.5	1479.3	1479.3
12.5°	1480.5	1466.8	1471.7	1467.5	1466.7
15°	1458.4	1445.1	1450.0	1446.9	1446.9
17.5°	1431.6	1418.9	1425.3	1420.2	1418.6
20°	1412.3	1398.0	1406.0	1397.7	1397.7
22.5°	1388.9	1376.2	1383.5	1373.4	1371.7
25°	1351.6	1340.4	1346.4	1335.9	1331.8
27.5°	1309.8	1297.7	1306.7	1294.9	1292.6
30°	1280.5	1269.3	1277.4	1264.7	1261.7
32.5°	1248.7	1239.1	1244.7	1233.0	1230.7
35°	1198.9	1191.7	1194.7	1183.2	1182.2
37.5°	1146.0	1139.0	1141.8	1129.0	1128.2
40°	1110.0	1103.8	1105.8	1092.2	1092.2
42.5°	1073.2	1066.2	1066.5	1053.7	1052.9
45°	1012.7	1006.6	1004.3	993.8	992.8
47.5°	948.5	945.6	942.2	931.7	931.7
50°	904.9	902.9	898.7	888.2	888.2
52.5°	860.6	859.4	853.5	844.6	843.0
55°	796.1	793.1	784.6	775.2	775.2
57.5°	725.6	723.2	713.7	706.1	704.3
60°	677.9	673.8	664.3	655.9	654.9
62.5°	628.5	625.3	614.9	607.4	605.5
65°	554.5	548.3	538.8	531.4	530.4
67.5°	476.2	469.3	460.9	454.8	452.8
70°	422.7	416.5	409.1	403.8	401.7
72.5°	369.9	363.8	357.2	353.6	353.2
75°	288.7	284.7	281.4	277.2	277.2
77.5°	209.4	207.0	205.3	203.2	203.2
80°	160.1	160.1	160.1	158.0	158.0
82.5°	114.9	117.3	119.1	117.8	117.8
85°	56.5	60.6	64.9	65.9	67.0
87.5°	15.9	20.8	25.9	26.8	27.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)