

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: P521475

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521475  
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-075U-100D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

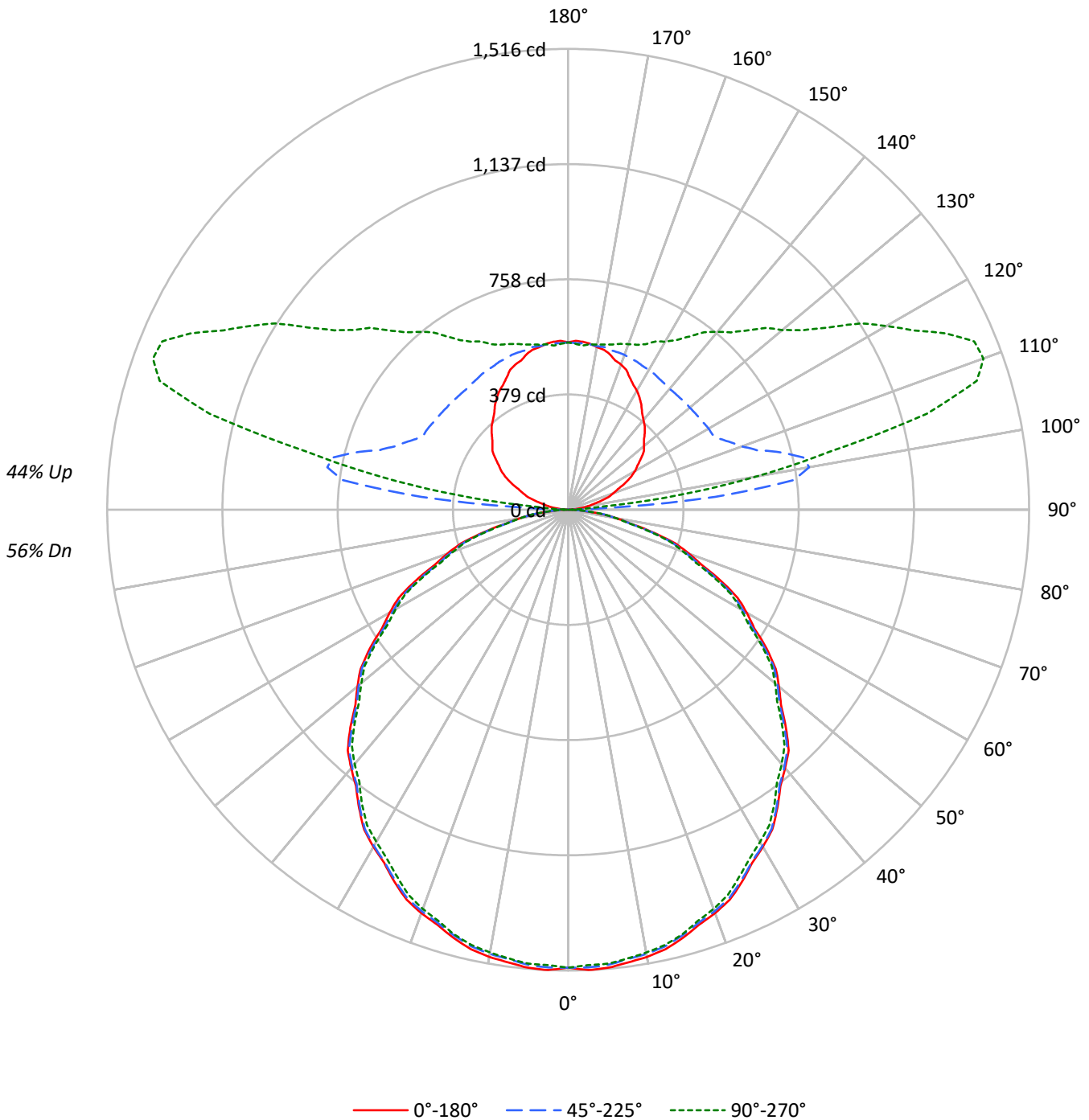
Lumens per Lamp: N/A  
Luminaire Lumens: 7713.1 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 65.9  
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				
1	99	94	90	87	92	88	84	81	76	73	71	64	63	61	54	53	52	47				
2	90	82	76	71	83	77	71	66	66	62	58	56	53	51	47	45	43	39				
3	82	72	65	59	76	67	61	55	58	53	49	50	46	43	42	39	36	33				
4	75	64	56	49	69	60	52	47	52	46	41	44	40	36	37	34	31	28				
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24				
6	63	51	43	37	58	48	40	35	41	35	31	36	31	27	30	27	24	21				
7	58	46	38	32	54	43	36	30	37	32	27	32	28	24	28	24	21	18				
8	54	42	34	28	50	39	32	27	34	28	24	30	25	21	25	22	19	16				
9	50	38	30	25	47	36	29	24	31	26	22	27	23	19	23	20	17	15				
10	47	35	27	23	44	33	26	22	29	23	19	25	21	17	22	18	15	13				

**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	1.8
10°-20°	408.6	5.3
20°-30°	617.8	8.0
30°-40°	744.0	9.6
40°-50°	772.7	10.0
50°-60°	700.4	9.1
60°-70°	533.4	6.9
70°-80°	298.0	3.9
80°-90°	77.3	1.0
90°-100°	250.8	3.3
100°-110°	713.5	9.3
110°-120°	683.6	8.9
120°-130°	541.0	7.0
130°-140°	434.3	5.6
140°-150°	340.0	4.4
150°-160°	248.8	3.2
160°-170°	154.1	2.0
170°-180°	52.3	0.7
0°-30°	1169.0	15.2
0°-40°	1913.0	24.8
0°-60°	3386.1	43.9
0°-90°	4294.9	55.7
90°-120°	1647.8	21.4
90°-150°	2963.1	38.4
90°-180°	3418.0	44.3
0°-180°	7713.1	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°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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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°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)