

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: P521444

Luminaire Tested: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521444  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5121.0 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

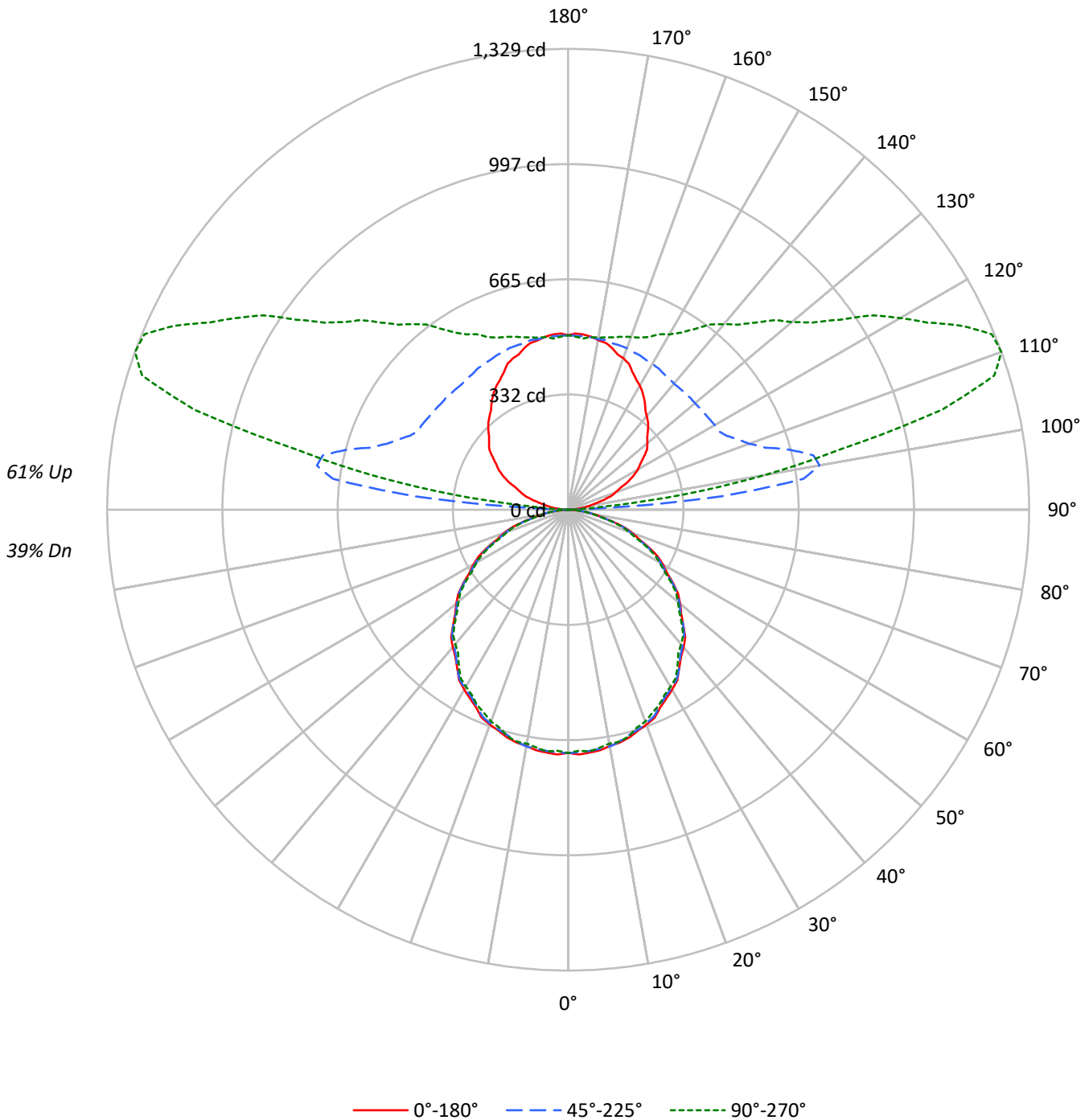
Input Watts (W): 44.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																				
0	105	105	105	105	95	95	95	95	77	77	77		61	61	61		46	46	46	39
1	95	91	87	84	86	83	79	77	67	65	63		53	52	50		40	40	39	33
2	87	79	73	68	78	72	67	63	59	55	52		47	44	42		35	34	32	27
3	79	69	62	56	71	63	57	52	52	47	44		41	38	35		31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37		37	33	30		28	25	23	19
5	66	54	46	41	60	50	43	38	41	36	32		33	29	26		25	22	20	17
6	61	49	41	35	55	45	38	32	37	31	27		29	26	23		23	20	18	15
7	56	44	36	31	51	40	33	28	33	28	24		27	23	20		21	18	16	13
8	52	40	32	27	47	36	30	25	30	25	21		24	20	18		19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19		22	19	16		17	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17		21	17	14		16	13	11	9

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

	0°	45°	90°
0°	6470	6470	6470
5°	6513	6468	6477
10°	6480	6498	6417
15°	6497	6433	6461
20°	6472	6444	6378
25°	6399	6359	6321
30°	6380	6340	6278
35°	6283	6283	6186
40°	6234	6176	6095
45°	6117	6117	6029
50°	6043	6001	5919
55°	5940	5879	5786
60°	5809	5702	5613
65°	5576	5451	5346
70°	5317	5136	5007
75°	4741	4606	4534
80°	3916	3863	3815
85°	2837	3144	3144

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6117 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.4	1.3
10°-20°	190.2	3.7
20°-30°	287.4	5.6
30°-40°	346.2	6.8
40°-50°	358.9	7.0
50°-60°	325.4	6.4
60°-70°	247.3	4.8
70°-80°	137.7	2.7
80°-90°	35.5	0.7
90°-100°	229.3	4.5
100°-110°	652.5	12.7
110°-120°	625.2	12.2
120°-130°	494.8	9.7
130°-140°	397.1	7.8
140°-150°	310.9	6.1
150°-160°	227.5	4.4
160°-170°	140.9	2.8
170°-180°	47.8	0.9
0°-30°	544.0	10.6
0°-40°	890.2	17.4
0°-60°	1574.5	30.7
0°-90°	1995.0	39.0
90°-120°	1507.0	29.4
90°-150°	2709.8	52.9
90°-180°	3126.0	61.0
0°-180°	5121.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	703	695	698	699	699	67
15°	680	674	674	674	676	192
25°	629	624	625	621	621	291
35°	558	552	558	551	549	350
45°	469	466	469	460	462	363
55°	369	368	366	362	360	329
65°	255	254	250	247	245	253
75°	133	131	129	127	127	141
85°	27	29	30	31	30	33
90°	0	0	0	0	0	2
95°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	701.3	701.3	701.3	701.3	701.3
2.5°	706.6	699.2	700.5	701.2	695.9
5°	703.2	694.8	698.4	699.4	699.4
7.5°	700.1	693.6	695.9	693.1	692.7
10°	691.7	688.9	693.6	686.9	685.0
12.5°	687.9	683.6	684.4	683.2	685.0
15°	680.2	673.7	673.5	673.6	676.4
17.5°	668.4	660.0	665.5	659.6	658.8
20°	659.2	650.8	656.3	649.6	649.6
22.5°	650.0	640.1	645.6	636.6	634.3
25°	628.6	623.9	624.7	620.9	620.9
27.5°	613.5	603.2	606.6	601.2	601.6
30°	598.9	588.6	595.1	587.5	589.3
32.5°	584.4	577.8	581.3	573.0	576.3
35°	557.8	552.2	557.8	551.0	549.2
37.5°	534.4	528.6	530.4	526.1	521.4
40°	517.6	511.0	512.8	507.0	506.1
42.5°	499.2	494.9	495.2	490.2	490.8
45°	468.8	466.0	468.8	460.2	462.1
47.5°	441.6	438.3	438.0	432.3	434.5
50°	421.0	419.1	418.1	412.4	412.4
52.5°	399.5	397.7	396.7	392.4	391.7
55°	369.3	368.4	365.5	361.6	359.7
57.5°	336.2	334.3	332.8	328.7	327.2
60°	314.8	312.9	309.0	304.2	304.2
62.5°	291.0	289.2	284.5	282.7	279.7
65°	255.4	254.5	249.7	246.8	244.9
67.5°	220.0	217.1	214.9	211.2	209.3
70°	197.1	193.3	190.4	187.5	185.6
72.5°	171.8	168.8	165.9	164.5	161.9
75°	133.0	131.1	129.2	127.2	127.2
77.5°	96.6	96.1	94.1	94.1	93.2
80°	73.7	74.6	72.7	72.7	71.8
82.5°	53.0	53.9	53.6	54.3	53.4
85°	26.8	28.7	29.7	30.6	29.7
87.5°	7.7	9.9	11.5	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)