

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: P521447

Luminaire Tested: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521447  
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\_4000K  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5450.5 lumens  
Efficiency: N/A  
Efficacy: 122.8 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

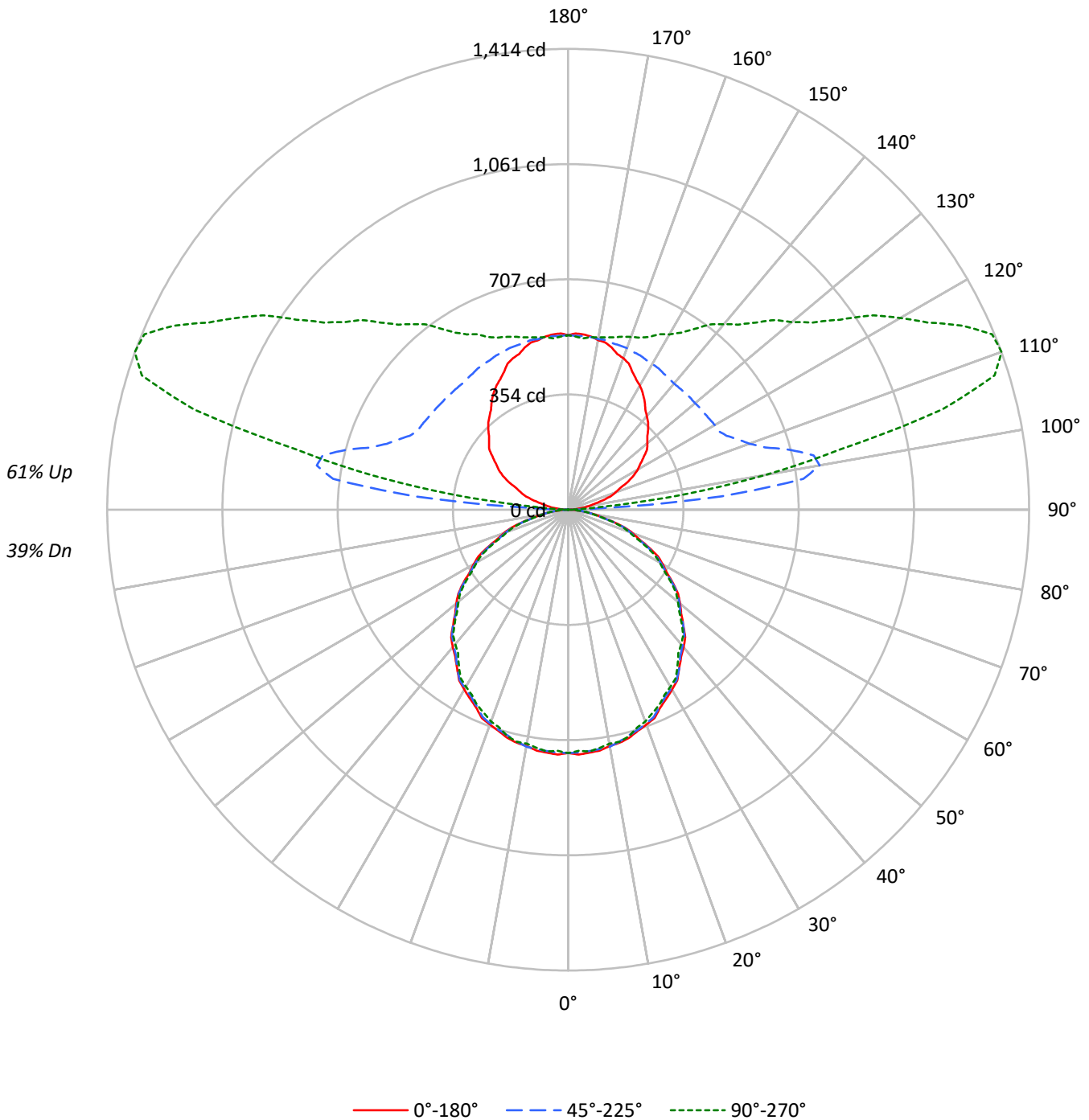
Input Watts (W): 44.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	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°	6886	6886	6886
5°	6931	6885	6894
10°	6897	6917	6831
15°	6915	6848	6876
20°	6889	6858	6788
25°	6810	6769	6728
30°	6792	6748	6683
35°	6687	6687	6583
40°	6635	6574	6488
45°	6511	6511	6417
50°	6430	6387	6300
55°	6323	6257	6159
60°	6182	6069	5975
65°	5936	5803	5691
70°	5659	5465	5328
75°	5044	4902	4827
80°	4166	4112	4059
85°	3017	3345	3345

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6511 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.7	1.3
10°-20°	202.5	3.7
20°-30°	305.9	5.6
30°-40°	368.4	6.8
40°-50°	382.0	7.0
50°-60°	346.3	6.4
60°-70°	263.3	4.8
70°-80°	146.6	2.7
80°-90°	37.8	0.7
90°-100°	244.1	4.5
100°-110°	694.5	12.7
110°-120°	665.4	12.2
120°-130°	526.6	9.7
130°-140°	422.7	7.8
140°-150°	330.9	6.1
150°-160°	242.1	4.4
160°-170°	150.0	2.8
170°-180°	50.9	0.9
0°-30°	579.0	10.6
0°-40°	947.4	17.4
0°-60°	1675.8	30.7
0°-90°	2123.4	39.0
90°-120°	1603.9	29.4
90°-150°	2884.1	52.9
90°-180°	3327.0	61.0
0°-180°	5450.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	748	740	743	744	744	71
15°	724	717	717	717	720	204
25°	669	664	665	661	661	310
35°	594	588	594	586	584	372
45°	499	496	499	490	492	386
55°	393	392	389	385	383	351
65°	272	271	266	263	261	269
75°	142	140	138	135	135	151
85°	28	30	32	33	32	35
90°	0	0	0	0	0	2
95°	26	105	472	164	101	30
105°	108	164	708	1250	1188	114
115°	201	242	537	1137	1335	198
125°	283	314	512	850	1016	253
135°	346	375	506	718	812	267
145°	408	429	510	621	677	255
155°	466	477	522	562	584	216
165°	515	517	528	540	548	145
175°	540	537	535	532	528	51
180°	536	536	536	536	536	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	746.4	746.4	746.4	746.4	746.4
2.5°	752.1	744.1	745.6	746.3	740.7
5°	748.4	739.5	743.4	744.4	744.4
7.5°	745.2	738.2	740.7	737.6	737.2
10°	736.2	733.2	738.3	731.1	729.1
12.5°	732.2	727.6	728.5	727.1	729.1
15°	724.0	717.0	716.9	716.9	719.9
17.5°	711.4	702.4	708.3	702.0	701.2
20°	701.6	692.6	698.5	691.4	691.4
22.5°	691.8	681.3	687.1	677.5	675.1
25°	669.0	664.0	664.9	660.9	660.9
27.5°	652.9	642.0	645.6	639.9	640.3
30°	637.5	626.5	633.4	625.3	627.3
32.5°	622.0	615.0	618.7	609.8	613.4
35°	593.7	587.7	593.7	586.5	584.5
37.5°	568.8	562.6	564.5	559.9	555.0
40°	550.9	543.9	545.8	539.7	538.7
42.5°	531.3	526.8	527.1	521.8	522.4
45°	499.0	496.0	499.0	489.8	491.8
47.5°	470.0	466.5	466.2	460.1	462.5
50°	448.0	446.1	445.0	438.9	438.9
52.5°	425.2	423.2	422.2	417.7	416.9
55°	393.1	392.1	389.0	384.9	382.9
57.5°	357.8	355.8	354.2	349.8	348.3
60°	335.0	333.0	328.9	323.8	323.8
62.5°	309.8	307.8	302.8	300.9	297.7
65°	271.9	270.9	265.8	262.7	260.7
67.5°	234.2	231.0	228.7	224.8	222.8
70°	209.8	205.8	202.6	199.5	197.5
72.5°	182.9	179.7	176.6	175.1	172.3
75°	141.5	139.6	137.5	135.4	135.4
77.5°	102.8	102.3	100.2	100.2	99.2
80°	78.4	79.4	77.4	77.4	76.4
82.5°	56.4	57.4	57.0	57.8	56.8
85°	28.5	30.5	31.6	32.6	31.6
87.5°	8.1	10.5	12.2	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	43.2	100.2	29.2	22.0
95°	26.5	105.1	472.5	163.5	100.8
97.5°	48.7	123.2	727.7	520.7	356.8
100°	64.2	133.8	783.1	793.2	611.0
102.5°	81.3	145.4	770.8	1015.3	856.2
105°	107.9	163.7	707.7	1250.1	1188.4
107.5°	135.0	185.0	634.0	1316.3	1371.2
110°	153.8	200.6	591.6	1290.9	1414.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	171.7	216.1	563.1	1231.0	1407.1
115°	200.6	242.4	536.6	1136.8	1335.0
117.5°	226.1	265.3	521.0	1033.9	1243.7
120°	246.4	279.3	519.3	975.0	1176.1
122.5°	262.7	295.6	515.3	923.4	1110.1
125°	283.1	314.0	512.2	850.0	1016.3
127.5°	305.3	334.2	510.6	806.1	943.1
130°	316.7	345.6	508.1	775.6	895.1
132.5°	328.9	357.0	508.1	751.8	861.7
135°	346.2	375.1	506.1	718.0	811.6
137.5°	362.5	390.6	505.9	689.4	770.2
140°	374.7	403.6	505.1	665.7	743.4
142.5°	388.6	412.7	507.5	646.8	716.5
145°	408.3	429.2	510.2	621.4	677.2
147.5°	425.2	445.6	514.6	595.8	644.0
150°	439.9	453.8	516.3	587.3	621.2
152.5°	451.3	466.0	517.9	575.8	607.3
155°	466.4	477.3	522.4	561.6	584.5
157.5°	485.1	491.7	523.4	555.1	571.5
160°	494.9	499.9	527.5	550.2	564.1
162.5°	500.6	506.4	528.3	546.1	556.8
165°	515.3	517.2	528.5	539.9	547.8
167.5°	525.2	523.4	533.2	538.3	541.5
170°	528.5	527.5	531.5	532.7	536.6
172.5°	535.8	532.4	534.0	531.0	534.2
175°	539.7	536.7	534.6	531.5	527.5
177.5°	541.3	536.5	534.0	530.8	531.5
180°	535.6	535.6	535.6	535.6	535.6

(END OF REPORT)