

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: P521395

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521395  
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-050U-050D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 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: 4346.1 lumens  
Efficiency: N/A  
Efficacy: 119.1 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: General Diffuse

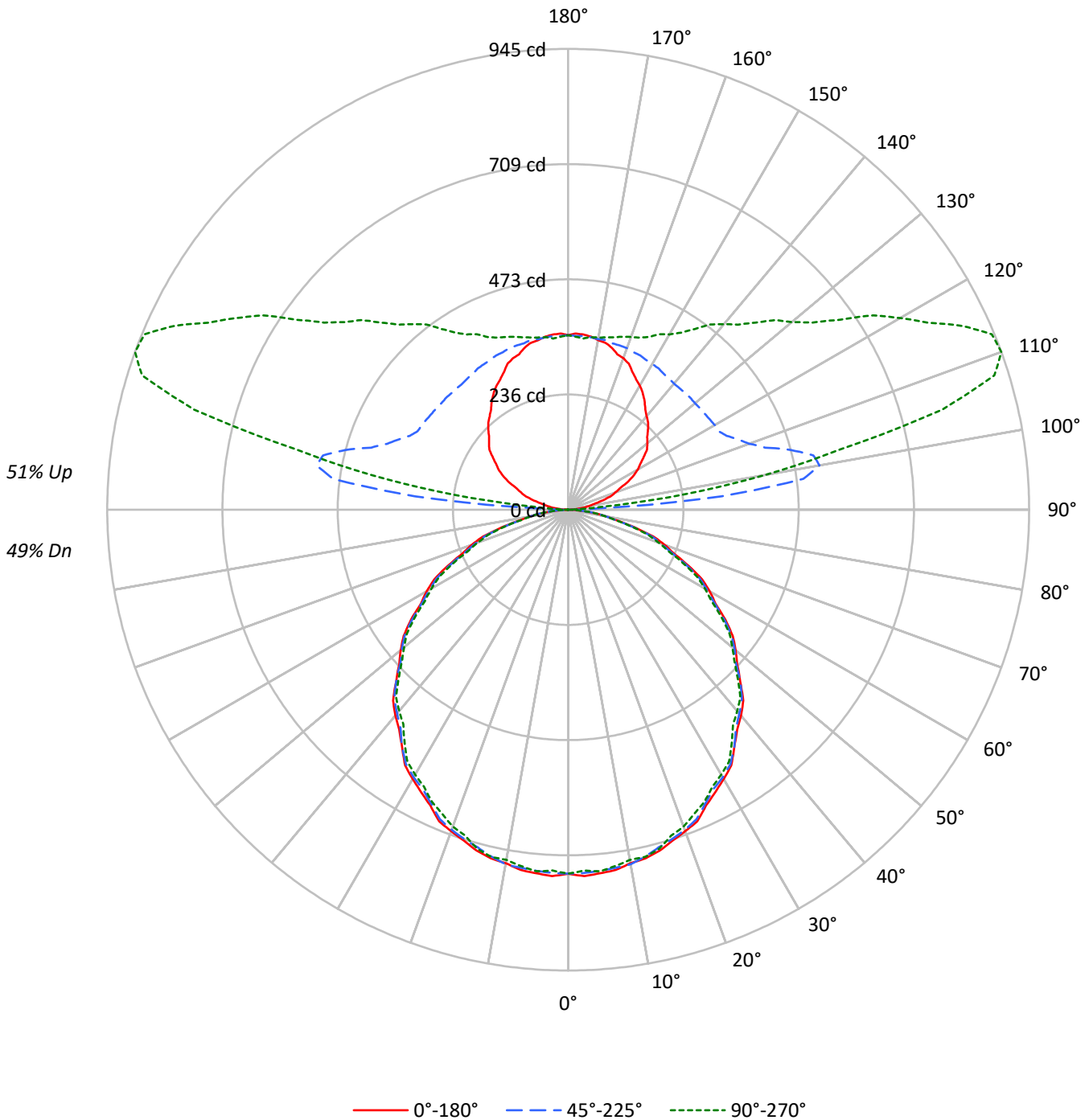
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521395

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_4000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521395

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_4000K

**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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12

**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

TEST NUMBER: P521395

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.7	1.6
10°-20°	202.5	4.7
20°-30°	305.9	7.0
30°-40°	368.4	8.5
40°-50°	382.0	8.8
50°-60°	346.3	8.0
60°-70°	263.3	6.1
70°-80°	146.6	3.4
80°-90°	37.8	0.9
90°-100°	163.0	3.8
100°-110°	463.9	10.7
110°-120°	444.5	10.2
120°-130°	351.8	8.1
130°-140°	282.4	6.5
140°-150°	221.1	5.1
150°-160°	161.8	3.7
160°-170°	100.2	2.3
170°-180°	34.0	0.8
0°-30°	579.0	13.3
0°-40°	947.4	21.8
0°-60°	1675.8	38.6
0°-90°	2123.4	48.9
90°-120°	1071.5	24.7
90°-150°	1926.7	44.3
90°-180°	2223.0	51.1
0°-180°	4346.1	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°	18	70	316	109	67	20
105°	72	109	473	835	794	76
115°	134	162	358	760	892	132
125°	189	210	342	568	679	169
135°	231	251	338	480	542	178
145°	273	287	341	415	452	170
155°	312	319	349	375	390	144
165°	344	346	353	361	366	97
175°	360	358	357	355	352	34
180°	358	358	358	358	358	

TEST NUMBER: P521395

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_4000K

**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°	5.4	28.9	66.9	19.5	14.7
95°	17.7	70.2	315.6	109.3	67.3
97.5°	32.5	82.3	486.1	347.8	238.4
100°	42.9	89.4	523.1	529.9	408.2
102.5°	54.3	97.1	515.0	678.3	572.0
105°	72.1	109.4	472.8	835.1	793.9
107.5°	90.2	123.6	423.5	879.3	916.0
110°	102.7	134.0	395.2	862.4	944.9

TEST NUMBER: P521395

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	114.7	144.4	376.2	822.4	940.0
115°	134.0	161.9	358.5	759.5	891.8
117.5°	151.0	177.2	348.0	690.7	830.9
120°	164.6	186.6	346.9	651.3	785.7
122.5°	175.5	197.5	344.2	616.8	741.6
125°	189.1	209.7	342.2	567.8	678.9
127.5°	203.9	223.2	341.1	538.5	630.1
130°	211.6	230.9	339.5	518.1	598.0
132.5°	219.7	238.5	339.5	502.2	575.6
135°	231.3	250.6	338.1	479.6	542.2
137.5°	242.2	260.9	338.0	460.5	514.6
140°	250.3	269.6	337.4	444.7	496.6
142.5°	259.6	275.7	339.0	432.1	478.6
145°	272.8	286.8	340.8	415.1	452.4
147.5°	284.1	297.6	343.8	398.0	430.2
150°	293.9	303.2	344.9	392.3	415.0
152.5°	301.5	311.3	346.0	384.7	405.7
155°	311.6	318.9	349.0	375.2	390.5
157.5°	324.1	328.5	349.7	370.9	381.8
160°	330.6	333.9	352.4	367.6	376.9
162.5°	334.4	338.3	352.9	364.8	372.0
165°	344.2	345.5	353.1	360.7	366.0
167.5°	350.9	349.7	356.2	359.6	361.8
170°	353.1	352.4	355.1	355.8	358.5
172.5°	358.0	355.7	356.7	354.7	356.9
175°	360.5	358.5	357.1	355.0	352.4
177.5°	361.6	358.4	356.7	354.6	355.1
180°	357.8	357.8	357.8	357.8	357.8

(END OF REPORT)