

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: P521451

Luminaire Tested: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521451  
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\_6500K  
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 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5733.3 lumens  
Efficiency: N/A  
Efficacy: 130.3 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

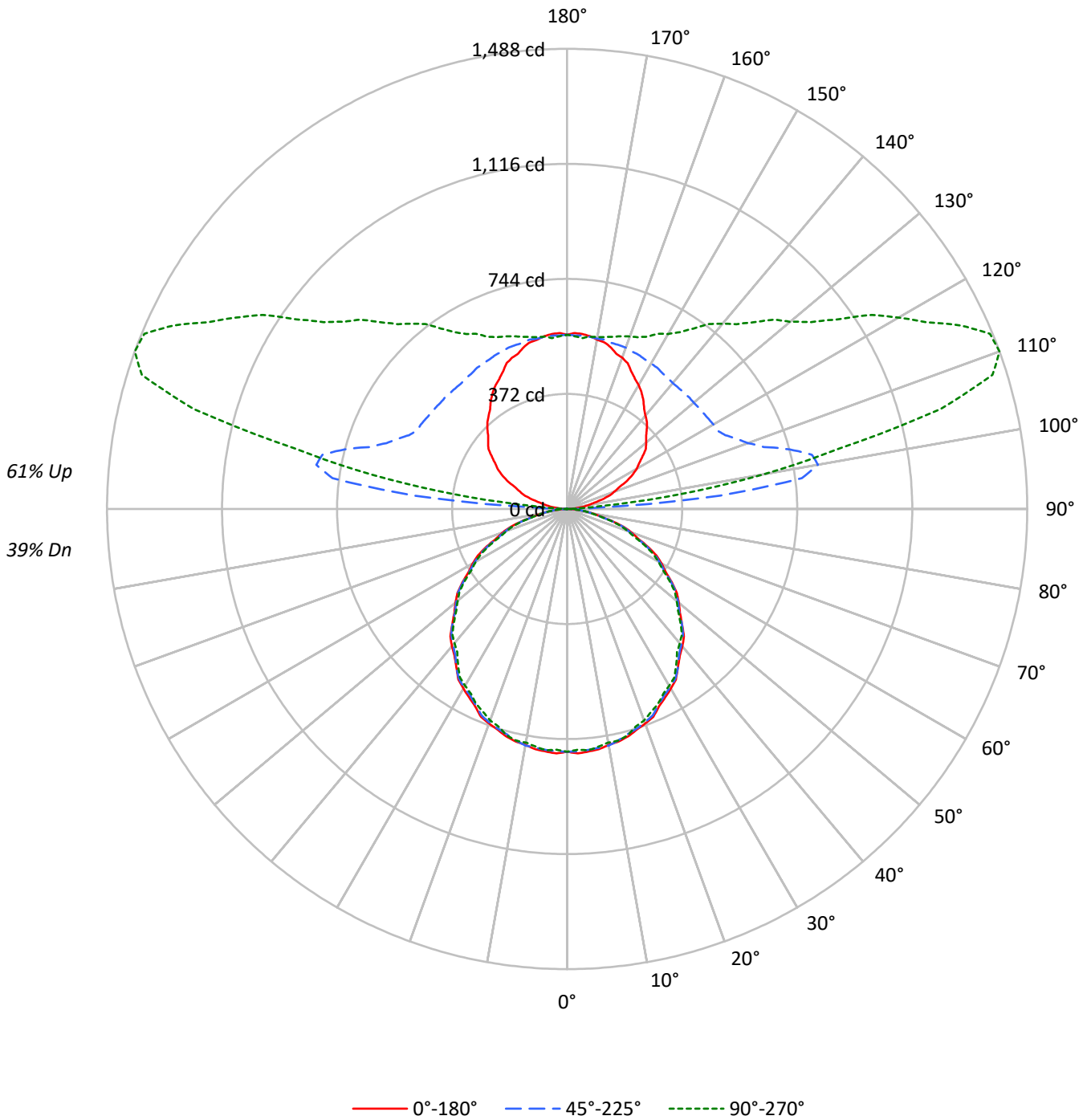
Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521451

CATALOG NUMBER: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_6500K

### Luminous Intensity Polar Plot



TEST NUMBER: P521451

CATALOG NUMBER: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_6500K

**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°	7243	7243	7243
5°	7292	7242	7252
10°	7255	7276	7185
15°	7275	7203	7233
20°	7246	7215	7141
25°	7164	7120	7077
30°	7143	7097	7029
35°	7034	7034	6925
40°	6979	6914	6824
45°	6849	6849	6751
50°	6765	6719	6627
55°	6651	6582	6478
60°	6503	6385	6285
65°	6244	6104	5986
70°	5954	5751	5606
75°	5308	5155	5080
80°	4383	4325	4266
85°	3176	3515	3515

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6849 cd/sqm

TEST NUMBER: P521451

CATALOG NUMBER: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.3	1.3
10°-20°	213.0	3.7
20°-30°	321.8	5.6
30°-40°	387.5	6.8
40°-50°	401.8	7.0
50°-60°	364.3	6.4
60°-70°	276.9	4.8
70°-80°	154.2	2.7
80°-90°	39.8	0.7
90°-100°	256.7	4.5
100°-110°	730.5	12.7
110°-120°	699.9	12.2
120°-130°	553.9	9.7
130°-140°	444.6	7.8
140°-150°	348.1	6.1
150°-160°	254.7	4.4
160°-170°	157.8	2.8
170°-180°	53.5	0.9
0°-30°	609.1	10.6
0°-40°	996.6	17.4
0°-60°	1762.7	30.7
0°-90°	2233.6	39.0
90°-120°	1687.1	29.4
90°-150°	3033.8	52.9
90°-180°	3500.0	61.0
0°-180°	5733.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	787	778	782	783	783	75
15°	762	754	754	754	757	215
25°	704	698	699	695	695	326
35°	624	618	624	617	615	392
45°	525	522	525	515	517	406
55°	414	412	409	405	403	369
65°	286	285	280	276	274	283
75°	149	147	145	142	142	158
85°	30	32	33	34	33	37
90°	0	0	0	0	0	2
95°	28	111	497	172	106	32
105°	114	172	744	1315	1250	120
115°	211	255	564	1196	1404	208
125°	298	330	539	894	1069	267
135°	364	395	532	755	854	281
145°	430	452	537	654	712	268
155°	491	502	550	591	615	227
165°	542	544	556	568	576	152
175°	568	565	562	559	555	54
180°	563	563	563	563	563	

TEST NUMBER: P521451

CATALOG NUMBER: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	785.1	785.1	785.1	785.1	785.1
2.5°	791.1	782.8	784.3	785.0	779.1
5°	787.3	777.9	781.9	783.0	783.0
7.5°	783.9	776.5	779.1	775.9	775.5
10°	774.4	771.3	776.6	769.0	766.9
12.5°	770.1	765.3	766.3	764.8	766.9
15°	761.6	754.2	754.1	754.1	757.3
17.5°	748.3	738.9	745.1	738.4	737.6
20°	738.0	728.6	734.8	727.3	727.3
22.5°	727.7	716.6	722.8	712.7	710.2
25°	703.7	698.5	699.4	695.2	695.2
27.5°	686.8	675.3	679.1	673.1	673.5
30°	670.5	659.0	666.2	657.7	659.8
32.5°	654.2	646.9	650.8	641.5	645.2
35°	624.5	618.2	624.5	616.9	614.8
37.5°	598.3	591.8	593.8	589.0	583.8
40°	579.5	572.1	574.1	567.7	566.6
42.5°	558.9	554.1	554.4	548.9	549.5
45°	524.9	521.7	524.9	515.3	517.4
47.5°	494.4	490.7	490.4	484.0	486.5
50°	471.3	469.2	468.1	461.7	461.7
52.5°	447.3	445.2	444.1	439.4	438.5
55°	413.5	412.4	409.2	404.8	402.7
57.5°	376.4	374.3	372.5	368.0	366.3
60°	352.4	350.3	346.0	340.6	340.6
62.5°	325.8	323.7	318.6	316.5	313.2
65°	286.0	284.9	279.6	276.3	274.2
67.5°	246.4	243.0	240.6	236.5	234.4
70°	220.7	216.5	213.2	209.9	207.8
72.5°	192.4	189.0	185.7	184.2	181.2
75°	148.9	146.8	144.6	142.5	142.5
77.5°	108.2	107.6	105.4	105.4	104.3
80°	82.5	83.5	81.4	81.4	80.3
82.5°	59.3	60.4	60.0	60.8	59.8
85°	30.0	32.1	33.2	34.3	33.2
87.5°	8.6	11.1	12.9	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.6	45.4	105.4	30.7	23.1
95°	27.8	110.6	497.0	172.0	106.0
97.5°	51.2	129.5	765.4	547.7	375.3
100°	67.5	140.8	823.7	834.3	642.7
102.5°	85.5	152.9	810.8	1068.0	900.6
105°	113.5	172.2	744.4	1314.9	1250.0
107.5°	142.0	194.6	666.9	1384.6	1442.4
110°	161.7	211.0	622.3	1357.9	1487.8

TEST NUMBER: P521451

CATALOG NUMBER: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4\_6500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	180.6	227.3	592.3	1294.9	1480.1
115°	211.0	255.0	564.5	1195.8	1404.3
117.5°	237.8	279.1	548.0	1087.5	1308.3
120°	259.2	293.8	546.3	1025.6	1237.2
122.5°	276.4	310.9	542.0	971.3	1167.7
125°	297.8	330.2	538.8	894.1	1069.0
127.5°	321.1	351.5	537.1	848.0	992.1
130°	333.1	363.5	534.5	815.8	941.5
132.5°	346.0	375.5	534.5	790.8	906.4
135°	364.2	394.6	532.4	755.2	853.7
137.5°	381.3	410.9	532.1	725.2	810.2
140°	394.2	424.5	531.3	700.2	781.9
142.5°	408.7	434.1	533.9	680.3	753.6
145°	429.5	451.5	536.6	653.7	712.3
147.5°	447.3	468.7	541.4	626.7	677.4
150°	462.7	477.4	543.1	617.8	653.4
152.5°	474.7	490.2	544.8	605.7	638.8
155°	490.6	502.1	549.5	590.7	614.8
157.5°	510.3	517.2	550.6	583.9	601.1
160°	520.6	525.8	554.8	578.7	593.4
162.5°	526.6	532.6	555.7	574.4	585.7
165°	542.0	544.1	555.9	567.9	576.3
167.5°	552.5	550.6	560.8	566.3	569.6
170°	555.9	554.9	559.1	560.3	564.5
172.5°	563.6	560.1	561.7	558.6	561.9
175°	567.7	564.6	562.3	559.0	554.8
177.5°	569.4	564.4	561.7	558.3	559.1
180°	563.4	563.4	563.4	563.4	563.4

(END OF REPORT)