

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: P521393

Luminaire Tested: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521393  
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\_3000K  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4168.0 lumens  
Efficiency: N/A  
Efficacy: 114.2 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

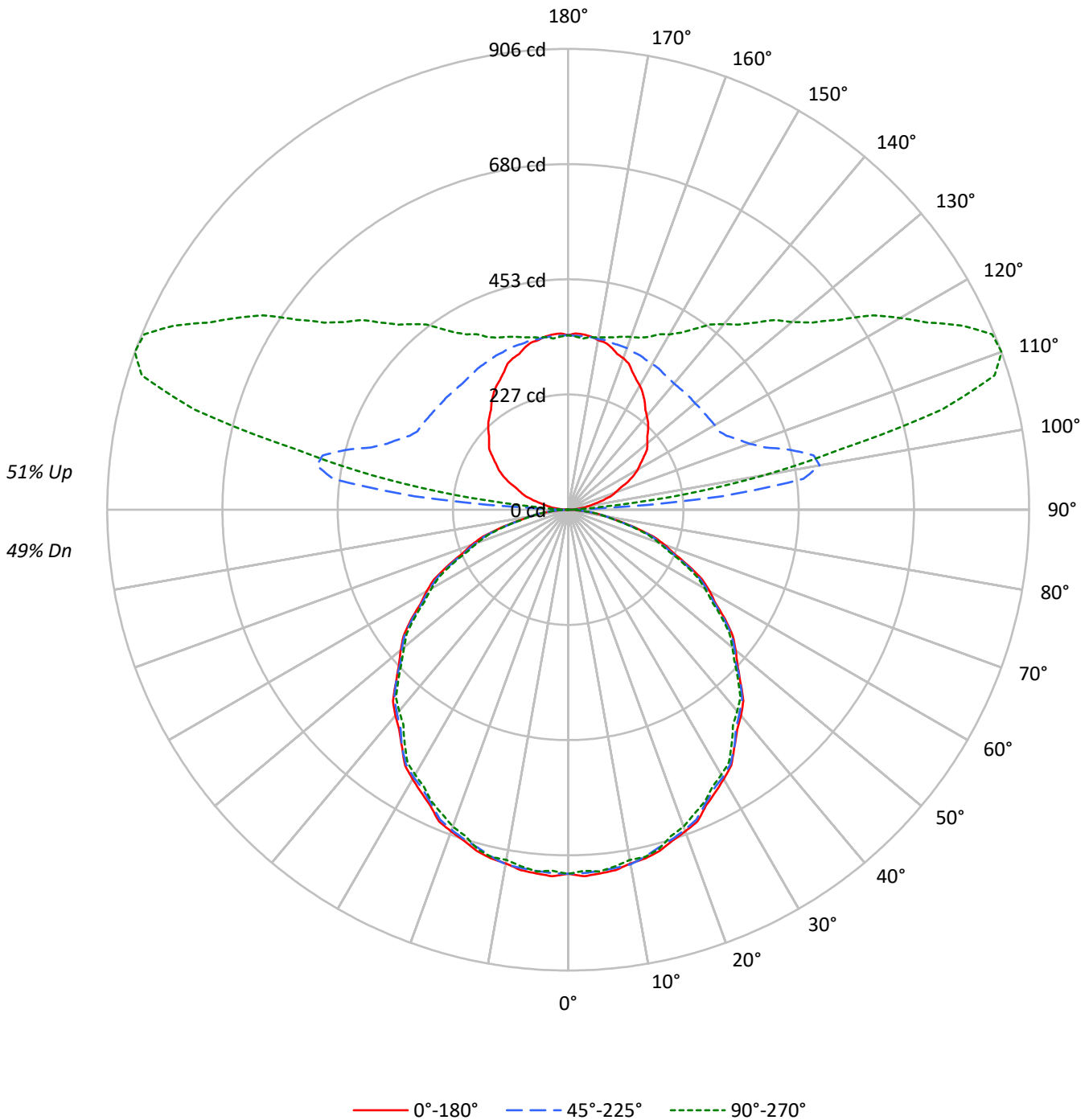
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521393

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_3000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521393

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_3000K

**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	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°	6604	6604	6604
5°	6648	6602	6612
10°	6615	6633	6550
15°	6632	6567	6594
20°	6607	6577	6511
25°	6531	6492	6452
30°	6512	6471	6409
35°	6412	6412	6313
40°	6363	6304	6222
45°	6243	6243	6155
50°	6168	6126	6041
55°	6064	6000	5907
60°	5929	5820	5729
65°	5691	5565	5458
70°	5427	5241	5112
75°	4837	4698	4631
80°	3995	3942	3889
85°	2890	3208	3208

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6243 cd/sqm

TEST NUMBER: P521393

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.8	1.6
10°-20°	194.2	4.7
20°-30°	293.4	7.0
30°-40°	353.3	8.5
40°-50°	366.3	8.8
50°-60°	332.1	8.0
60°-70°	252.5	6.1
70°-80°	140.6	3.4
80°-90°	36.2	0.9
90°-100°	156.4	3.8
100°-110°	444.9	10.7
110°-120°	426.3	10.2
120°-130°	337.4	8.1
130°-140°	270.8	6.5
140°-150°	212.0	5.1
150°-160°	155.1	3.7
160°-170°	96.1	2.3
170°-180°	32.6	0.8
0°-30°	555.3	13.3
0°-40°	908.6	21.8
0°-60°	1607.1	38.6
0°-90°	2036.4	48.9
90°-120°	1027.6	24.7
90°-150°	1847.8	44.3
90°-180°	2132.0	51.2
0°-180°	4168.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	718	709	713	714	714	68
15°	694	688	688	688	690	196
25°	642	637	638	634	634	297
35°	569	564	569	562	560	357
45°	478	476	478	470	472	370
55°	377	376	373	369	367	336
65°	261	260	255	252	250	258
75°	136	134	132	130	130	144
85°	27	29	30	31	30	33
90°	0	0	0	0	0	2
95°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

TEST NUMBER: P521393

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	715.8	715.8	715.8	715.8	715.8
2.5°	721.3	713.7	715.0	715.7	710.4
5°	717.8	709.2	712.9	713.9	713.9
7.5°	714.6	708.0	710.4	707.4	707.0
10°	706.1	703.2	708.0	701.1	699.2
12.5°	702.1	697.8	698.6	697.3	699.2
15°	694.3	687.7	687.5	687.6	690.4
17.5°	682.2	673.6	679.3	673.2	672.5
20°	672.9	664.3	669.9	663.1	663.1
22.5°	663.5	653.4	659.0	649.8	647.5
25°	641.6	636.8	637.7	633.8	633.8
27.5°	626.2	615.7	619.1	613.7	614.1
30°	611.3	600.8	607.4	599.7	601.6
32.5°	596.5	589.8	593.4	584.8	588.3
35°	569.3	563.6	569.3	562.5	560.5
37.5°	545.5	539.6	541.4	537.0	532.2
40°	528.3	521.6	523.4	517.6	516.6
42.5°	509.6	505.2	505.5	500.4	501.0
45°	478.5	475.7	478.5	469.8	471.7
47.5°	450.8	447.3	447.1	441.3	443.6
50°	429.7	427.8	426.8	420.9	420.9
52.5°	407.8	405.9	404.9	400.6	399.8
55°	377.0	376.0	373.0	369.1	367.2
57.5°	343.2	341.3	339.6	335.5	334.0
60°	321.3	319.4	315.4	310.5	310.5
62.5°	297.1	295.2	290.4	288.6	285.5
65°	260.7	259.8	254.9	251.9	250.0
67.5°	224.6	221.6	219.3	215.6	213.7
70°	201.2	197.4	194.3	191.4	189.5
72.5°	175.4	172.3	169.3	167.9	165.2
75°	135.7	133.8	131.8	129.9	129.9
77.5°	98.6	98.1	96.1	96.1	95.1
80°	75.2	76.2	74.2	74.2	73.2
82.5°	54.1	55.1	54.7	55.4	54.5
85°	27.3	29.3	30.3	31.2	30.3
87.5°	7.8	10.1	11.7	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

TEST NUMBER: P521393

CATALOG NUMBER: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.0	138.4	360.8	788.7	901.5
115°	128.5	155.3	343.8	728.3	855.3
117.5°	144.8	170.0	333.8	662.4	796.8
120°	157.9	178.9	332.7	624.7	753.5
122.5°	168.3	189.4	330.1	591.6	711.2
125°	181.4	201.1	328.2	544.6	651.1
127.5°	195.6	214.1	327.1	516.5	604.2
130°	202.9	221.4	325.5	496.9	573.4
132.5°	210.7	228.7	325.5	481.6	552.1
135°	221.8	240.3	324.2	460.0	520.0
137.5°	232.3	250.2	324.1	441.7	493.5
140°	240.1	258.6	323.6	426.5	476.2
142.5°	249.0	264.4	325.2	414.4	459.0
145°	261.6	275.0	326.8	398.1	433.8
147.5°	272.4	285.5	329.7	381.7	412.6
150°	281.8	290.8	330.8	376.3	398.0
152.5°	289.1	298.6	331.8	368.9	389.1
155°	298.8	305.8	334.7	359.8	374.5
157.5°	310.8	315.0	335.3	355.7	366.1
160°	317.1	320.3	337.9	352.5	361.4
162.5°	320.7	324.4	338.5	349.8	356.7
165°	330.1	331.4	338.6	345.9	351.0
167.5°	336.5	335.4	341.6	344.9	346.9
170°	338.6	338.0	340.5	341.3	343.8
172.5°	343.3	341.1	342.1	340.2	342.2
175°	345.8	343.9	342.5	340.5	337.9
177.5°	346.8	343.7	342.1	340.0	340.5
180°	343.2	343.2	343.2	343.2	343.2

(END OF REPORT)