

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: P521551

Luminaire Tested: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521551  
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-100U-050D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 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: 6575.9 lumens  
Efficiency: N/A  
Efficacy: 123.8 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

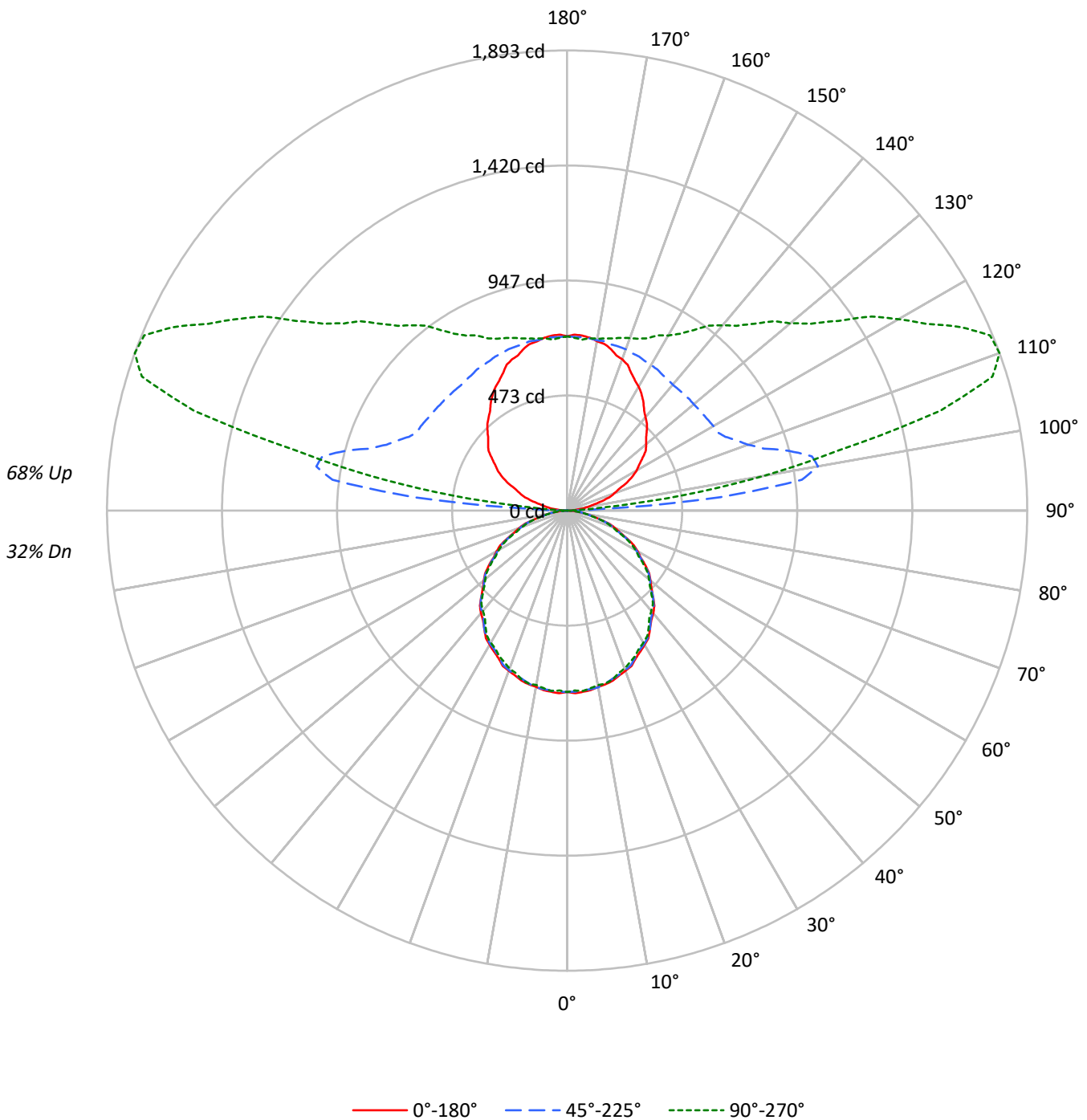
Input Watts (W): 53.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32				
1	94	89	86	82	84	81	77	75	64	62	60	49	48	46	35	34	33	27				
2	85	78	72	67	76	70	65	61	56	53	49	43	41	38	31	29	28	22				
3	78	68	61	56	70	62	56	51	49	45	41	38	35	32	27	25	24	19				
4	71	60	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16				
5	65	54	46	40	58	49	42	37	39	34	30	30	26	24	22	19	18	14				
6	60	48	40	34	53	43	37	32	35	30	26	27	23	21	20	17	15	12				
7	55	43	35	30	49	39	32	27	32	26	23	24	21	18	18	15	14	11				
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	10				
9	47	35	28	23	43	32	26	21	26	21	18	20	17	14	15	13	11	9				
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	12	10	8				

**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: P521551

CATALOG NUMBER: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4\_4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.7	1.1
10°-20°	202.5	3.1
20°-30°	305.9	4.7
30°-40°	368.4	5.6
40°-50°	382.0	5.8
50°-60°	346.3	5.3
60°-70°	263.3	4.0
70°-80°	146.6	2.2
80°-90°	37.8	0.6
90°-100°	326.6	5.0
100°-110°	929.4	14.1
110°-120°	890.4	13.5
120°-130°	704.7	10.7
130°-140°	565.7	8.6
140°-150°	442.8	6.7
150°-160°	324.0	4.9
160°-170°	200.7	3.1
170°-180°	68.1	1.0
0°-30°	579.0	8.8
0°-40°	947.4	14.4
0°-60°	1675.8	25.5
0°-90°	2123.4	32.3
90°-120°	2146.4	32.6
90°-150°	3859.7	58.7
90°-180°	4453.0	67.7
0°-180°	6575.9	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	3
95°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

TEST NUMBER: P521551

CATALOG NUMBER: SQ4-F-100U-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°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

TEST NUMBER: P521551

CATALOG NUMBER: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)