

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: P521550

Luminaire Tested: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521550  
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\_3500K  
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 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6457.8 lumens  
Efficiency: N/A  
Efficacy: 121.6 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

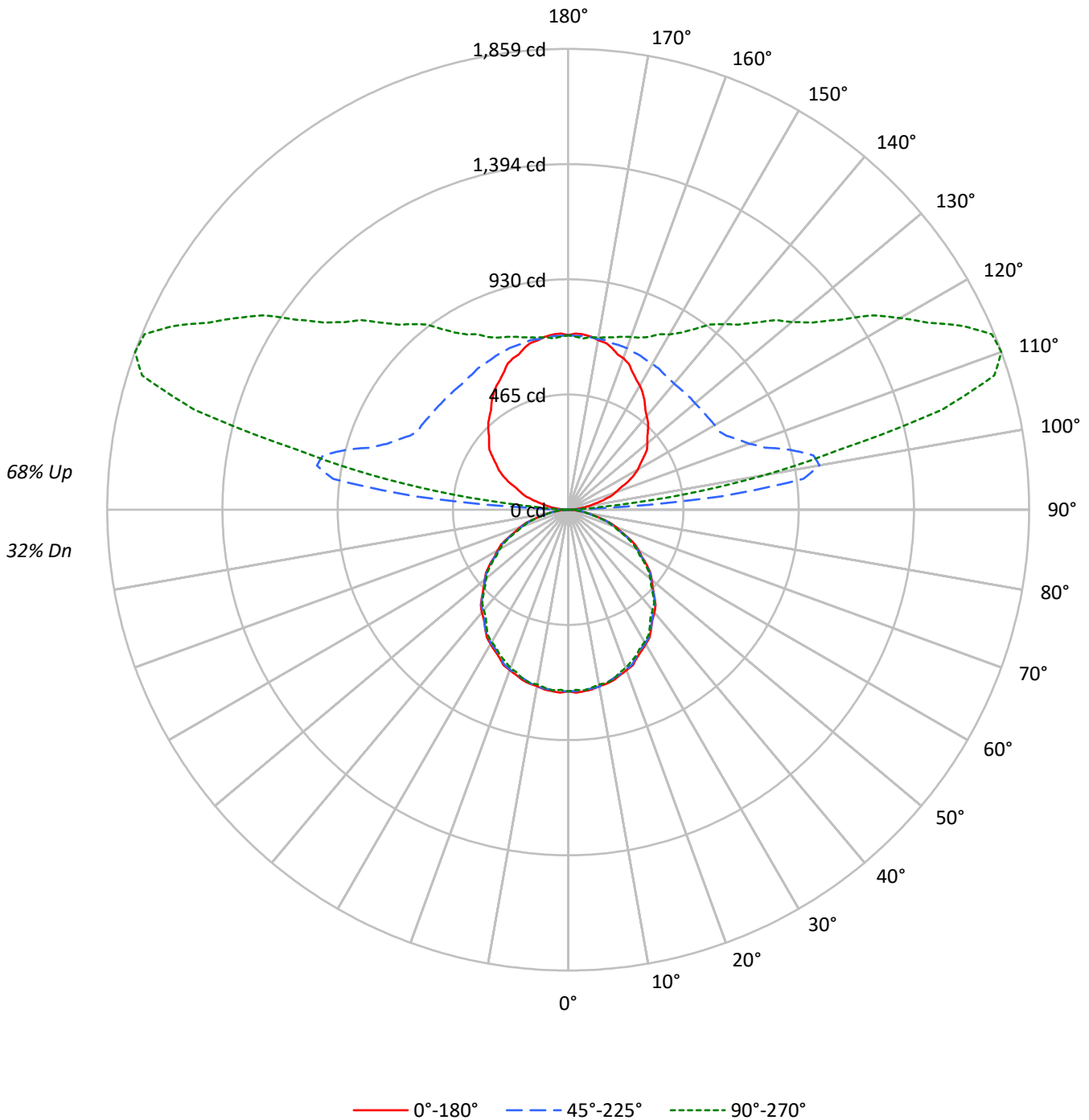
Input Watts (W): 53.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	30	23	19	24	19	16	19	15	13	14	12	10	8				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6763	6763	6763
5°	6807	6761	6770
10°	6773	6792	6708
15°	6791	6724	6753
20°	6765	6735	6667
25°	6688	6648	6607
30°	6669	6626	6563
35°	6566	6566	6465
40°	6516	6456	6371
45°	6393	6393	6302
50°	6316	6272	6186
55°	6209	6145	6048
60°	6071	5960	5868
65°	5829	5698	5589
70°	5557	5368	5233
75°	4955	4812	4741
80°	4091	4038	3985
85°	2964	3282	3282

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6393 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.4	1.1
10°-20°	198.8	3.1
20°-30°	300.4	4.7
30°-40°	361.8	5.6
40°-50°	375.1	5.8
50°-60°	340.1	5.3
60°-70°	258.5	4.0
70°-80°	144.0	2.2
80°-90°	37.1	0.6
90°-100°	320.7	5.0
100°-110°	912.7	14.1
110°-120°	874.4	13.5
120°-130°	692.1	10.7
130°-140°	555.5	8.6
140°-150°	434.9	6.7
150°-160°	318.2	4.9
160°-170°	197.1	3.1
170°-180°	66.9	1.0
0°-30°	568.6	8.8
0°-40°	930.4	14.4
0°-60°	1645.7	25.5
0°-90°	2085.3	32.3
90°-120°	2107.9	32.6
90°-150°	3790.4	58.7
90°-180°	4373.0	67.7
0°-180°	6457.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	733	733	733	733	733	
5°	735	726	730	731	731	70
15°	711	704	704	704	707	200
25°	657	652	653	649	649	304
35°	583	577	583	576	574	366
45°	490	487	490	481	483	379
55°	386	385	382	378	376	344
65°	267	266	261	258	256	264
75°	139	137	135	133	133	148
85°	28	30	31	32	31	34
90°	0	0	0	0	0	3
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	733.0	733.0	733.0	733.0	733.0
2.5°	738.6	730.8	732.2	732.9	727.4
5°	735.0	726.2	730.0	731.0	731.0
7.5°	731.8	725.0	727.4	724.4	724.0
10°	723.0	720.1	725.0	718.0	716.0
12.5°	719.0	714.5	715.4	714.0	716.0
15°	711.0	704.2	704.0	704.1	707.0
17.5°	698.6	689.8	695.6	689.4	688.6
20°	689.0	680.2	686.0	679.0	679.0
22.5°	679.4	669.0	674.8	665.3	663.0
25°	657.0	652.1	653.0	649.0	649.0
27.5°	641.2	630.4	634.0	628.4	628.8
30°	626.0	615.2	622.0	614.0	616.0
32.5°	610.8	604.0	607.6	598.9	602.4
35°	583.0	577.1	583.0	576.0	574.0
37.5°	558.6	552.5	554.4	549.9	545.0
40°	541.0	534.2	536.0	530.0	529.0
42.5°	521.8	517.3	517.6	512.4	513.0
45°	490.0	487.1	490.0	481.0	483.0
47.5°	461.6	458.1	457.8	451.9	454.2
50°	440.0	438.0	437.0	431.0	431.0
52.5°	417.6	415.6	414.6	410.2	409.4
55°	386.0	385.0	382.0	378.0	376.0
57.5°	351.4	349.4	347.8	343.6	342.0
60°	329.0	327.0	323.0	318.0	318.0
62.5°	304.2	302.2	297.4	295.5	292.4
65°	267.0	266.0	261.0	258.0	256.0
67.5°	230.0	226.9	224.6	220.8	218.8
70°	206.0	202.1	199.0	196.0	194.0
72.5°	179.6	176.5	173.4	171.9	169.2
75°	139.0	137.0	135.0	133.0	133.0
77.5°	101.0	100.4	98.4	98.4	97.4
80°	77.0	78.0	76.0	76.0	75.0
82.5°	55.4	56.4	56.0	56.8	55.8
85°	28.0	30.0	31.0	32.0	31.0
87.5°	8.0	10.3	12.0	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)