

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: P521548

Luminaire Tested: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521548  
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\_2700K  
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 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6178.4 lumens  
Efficiency: N/A  
Efficacy: 116.8 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

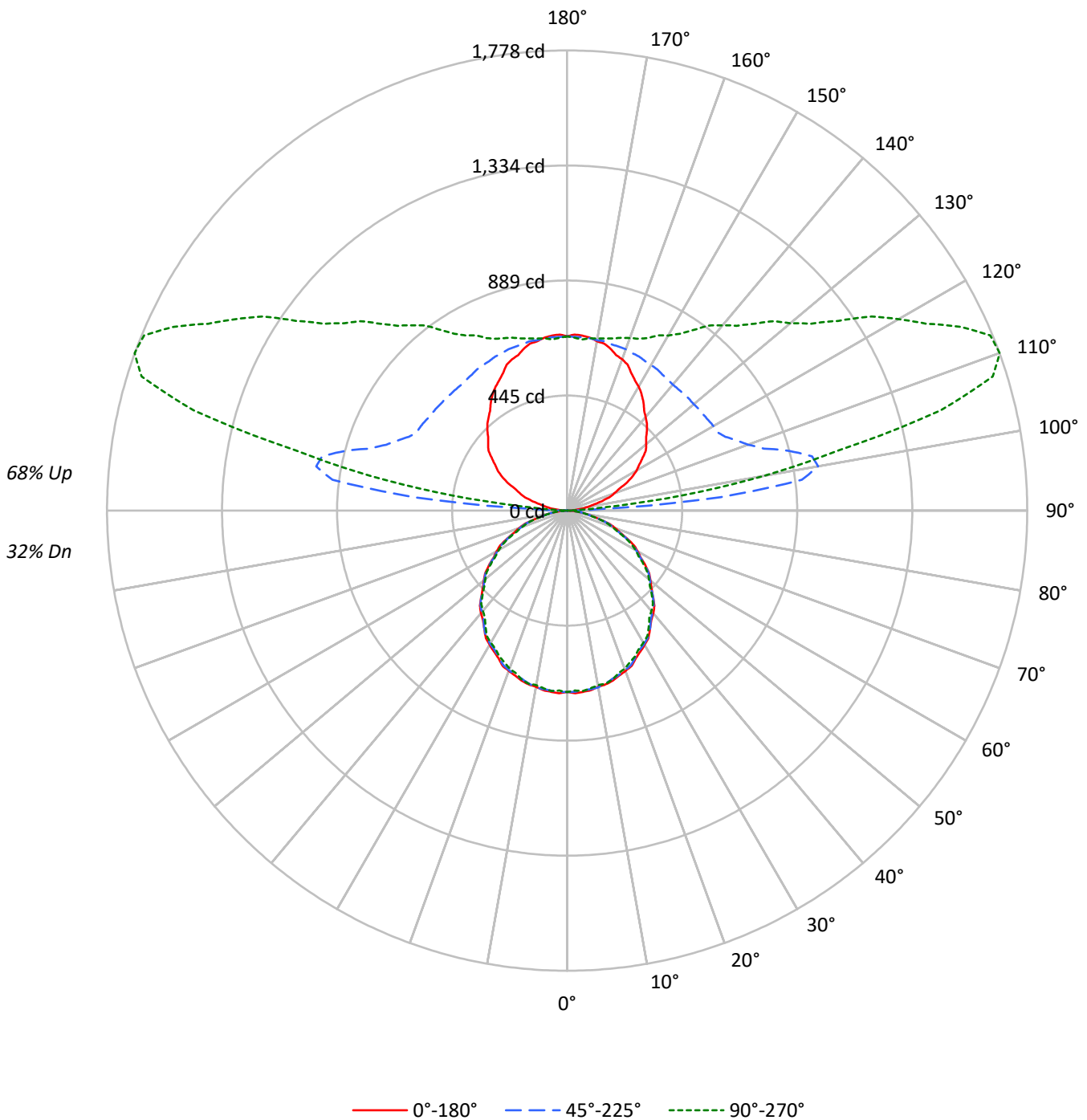
Input Watts (W): 52.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	6470	6470	6470
5°	6513	6468	6477
10°	6480	6498	6417
15°	6497	6433	6461
20°	6472	6444	6378
25°	6399	6359	6321
30°	6380	6340	6278
35°	6283	6283	6186
40°	6234	6176	6095
45°	6117	6117	6029
50°	6043	6001	5919
55°	5940	5879	5786
60°	5809	5702	5613
65°	5576	5451	5346
70°	5317	5136	5007
75°	4741	4606	4534
80°	3916	3863	3815
85°	2837	3144	3144

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6117 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.4	1.1
10°-20°	190.2	3.1
20°-30°	287.4	4.7
30°-40°	346.2	5.6
40°-50°	358.9	5.8
50°-60°	325.4	5.3
60°-70°	247.3	4.0
70°-80°	137.7	2.2
80°-90°	35.5	0.6
90°-100°	306.9	5.0
100°-110°	873.2	14.1
110°-120°	836.6	13.5
120°-130°	662.1	10.7
130°-140°	531.5	8.6
140°-150°	416.1	6.7
150°-160°	304.4	4.9
160°-170°	188.6	3.1
170°-180°	64.0	1.0
0°-30°	544.0	8.8
0°-40°	890.2	14.4
0°-60°	1574.5	25.5
0°-90°	1995.0	32.3
90°-120°	2016.7	32.6
90°-150°	3626.3	58.7
90°-180°	4183.0	67.7
0°-180°	6178.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	703	695	698	699	699	67
15°	680	674	674	674	676	192
25°	629	624	625	621	621	291
35°	558	552	558	551	549	350
45°	469	466	469	460	462	363
55°	369	368	366	362	360	329
65°	255	254	250	247	245	253
75°	133	131	129	127	127	141
85°	27	29	30	31	30	33
90°	0	0	0	0	0	2
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	701.3	701.3	701.3	701.3	701.3
2.5°	706.6	699.2	700.5	701.2	695.9
5°	703.2	694.8	698.4	699.4	699.4
7.5°	700.1	693.6	695.9	693.1	692.7
10°	691.7	688.9	693.6	686.9	685.0
12.5°	687.9	683.6	684.4	683.2	685.0
15°	680.2	673.7	673.5	673.6	676.4
17.5°	668.4	660.0	665.5	659.6	658.8
20°	659.2	650.8	656.3	649.6	649.6
22.5°	650.0	640.1	645.6	636.6	634.3
25°	628.6	623.9	624.7	620.9	620.9
27.5°	613.5	603.2	606.6	601.2	601.6
30°	598.9	588.6	595.1	587.5	589.3
32.5°	584.4	577.8	581.3	573.0	576.3
35°	557.8	552.2	557.8	551.0	549.2
37.5°	534.4	528.6	530.4	526.1	521.4
40°	517.6	511.0	512.8	507.0	506.1
42.5°	499.2	494.9	495.2	490.2	490.8
45°	468.8	466.0	468.8	460.2	462.1
47.5°	441.6	438.3	438.0	432.3	434.5
50°	421.0	419.1	418.1	412.4	412.4
52.5°	399.5	397.7	396.7	392.4	391.7
55°	369.3	368.4	365.5	361.6	359.7
57.5°	336.2	334.3	332.8	328.7	327.2
60°	314.8	312.9	309.0	304.2	304.2
62.5°	291.0	289.2	284.5	282.7	279.7
65°	255.4	254.5	249.7	246.8	244.9
67.5°	220.0	217.1	214.9	211.2	209.3
70°	197.1	193.3	190.4	187.5	185.6
72.5°	171.8	168.8	165.9	164.5	161.9
75°	133.0	131.1	129.2	127.2	127.2
77.5°	96.6	96.1	94.1	94.1	93.2
80°	73.7	74.6	72.7	72.7	71.8
82.5°	53.0	53.9	53.6	54.3	53.4
85°	26.8	28.7	29.7	30.6	29.7
87.5°	7.7	9.9	11.5	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)