

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: P521652

Luminaire Tested: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521652  
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-150U-050D-92765-1D-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 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: 8327.1 lumens  
Efficiency: N/A  
Efficacy: 116.3 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

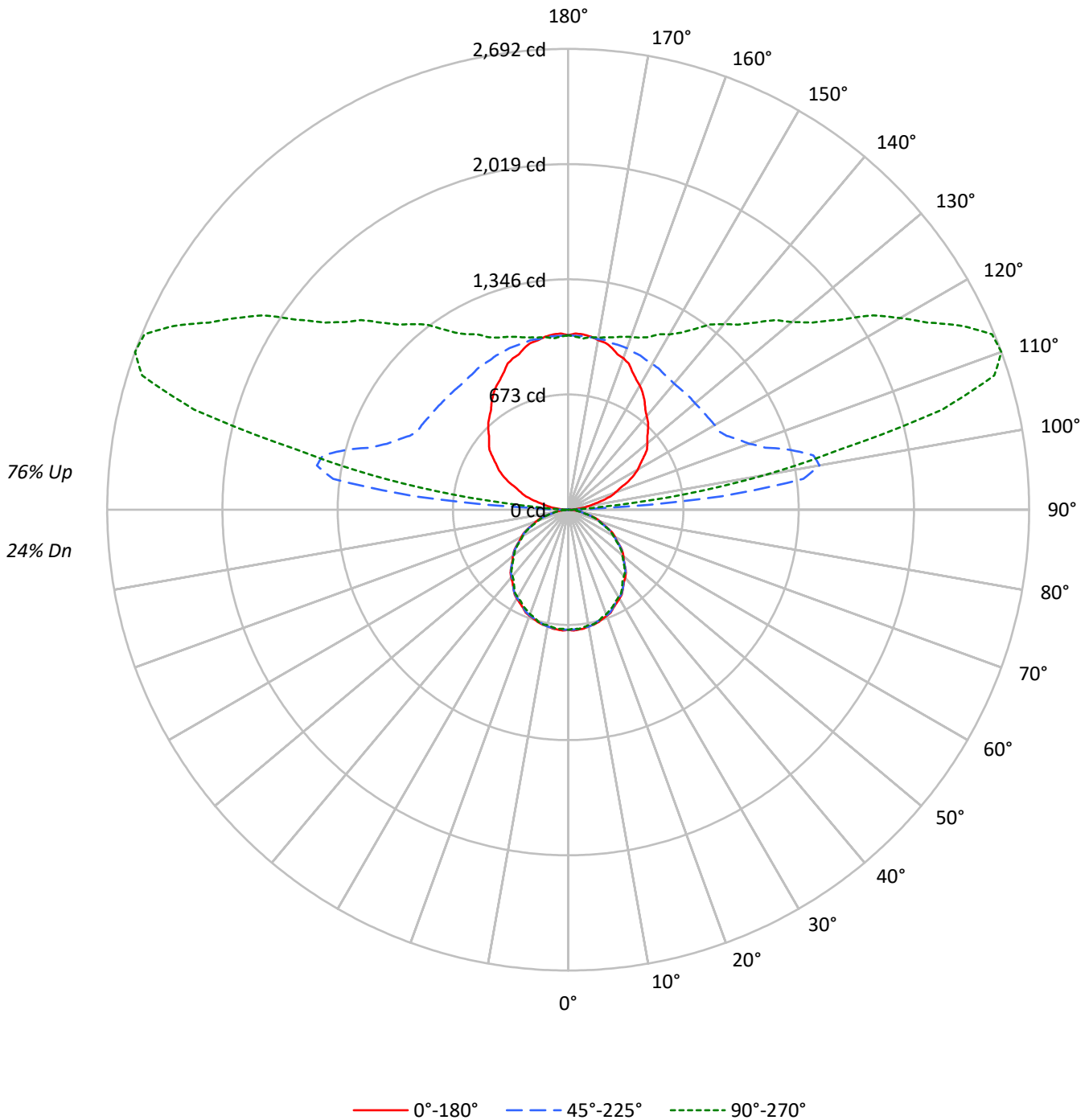
Input Watts (W): 71.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	76	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	54	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	69	59	52	46	61	53	46	41	41	36	33	30	27	24	19	18	16	12
5	64	52	45	39	56	47	40	35	36	32	28	27	23	21	17	16	14	10
6	58	47	39	33	52	42	35	30	33	28	24	24	21	18	16	14	12	9
7	54	42	34	29	48	38	31	26	29	25	21	22	18	16	14	12	11	8
8	50	38	31	25	44	34	28	23	27	22	19	20	16	14	13	11	10	7
9	46	35	27	22	41	31	25	20	24	20	17	18	15	13	12	10	9	6
10	43	31	25	20	38	28	22	18	22	18	15	17	13	11	11	9	8	6

**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	0.8
10°-20°	190.2	2.3
20°-30°	287.4	3.5
30°-40°	346.2	4.2
40°-50°	358.9	4.3
50°-60°	325.4	3.9
60°-70°	247.3	3.0
70°-80°	137.7	1.7
80°-90°	35.5	0.4
90°-100°	464.5	5.6
100°-110°	1321.7	15.9
110°-120°	1266.3	15.2
120°-130°	1002.2	12.0
130°-140°	804.5	9.7
140°-150°	629.8	7.6
150°-160°	460.8	5.5
160°-170°	285.4	3.4
170°-180°	96.9	1.2
0°-30°	544.0	6.5
0°-40°	890.2	10.7
0°-60°	1574.5	18.9
0°-90°	1995.0	24.0
90°-120°	3052.5	36.7
90°-150°	5489.0	65.9
90°-180°	6332.0	76.0
0°-180°	8327.1	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	3
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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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°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)