

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: P521431

Luminaire Tested: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521431  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 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: 7061.0 lumens  
Efficiency: N/A  
Efficacy: 98.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

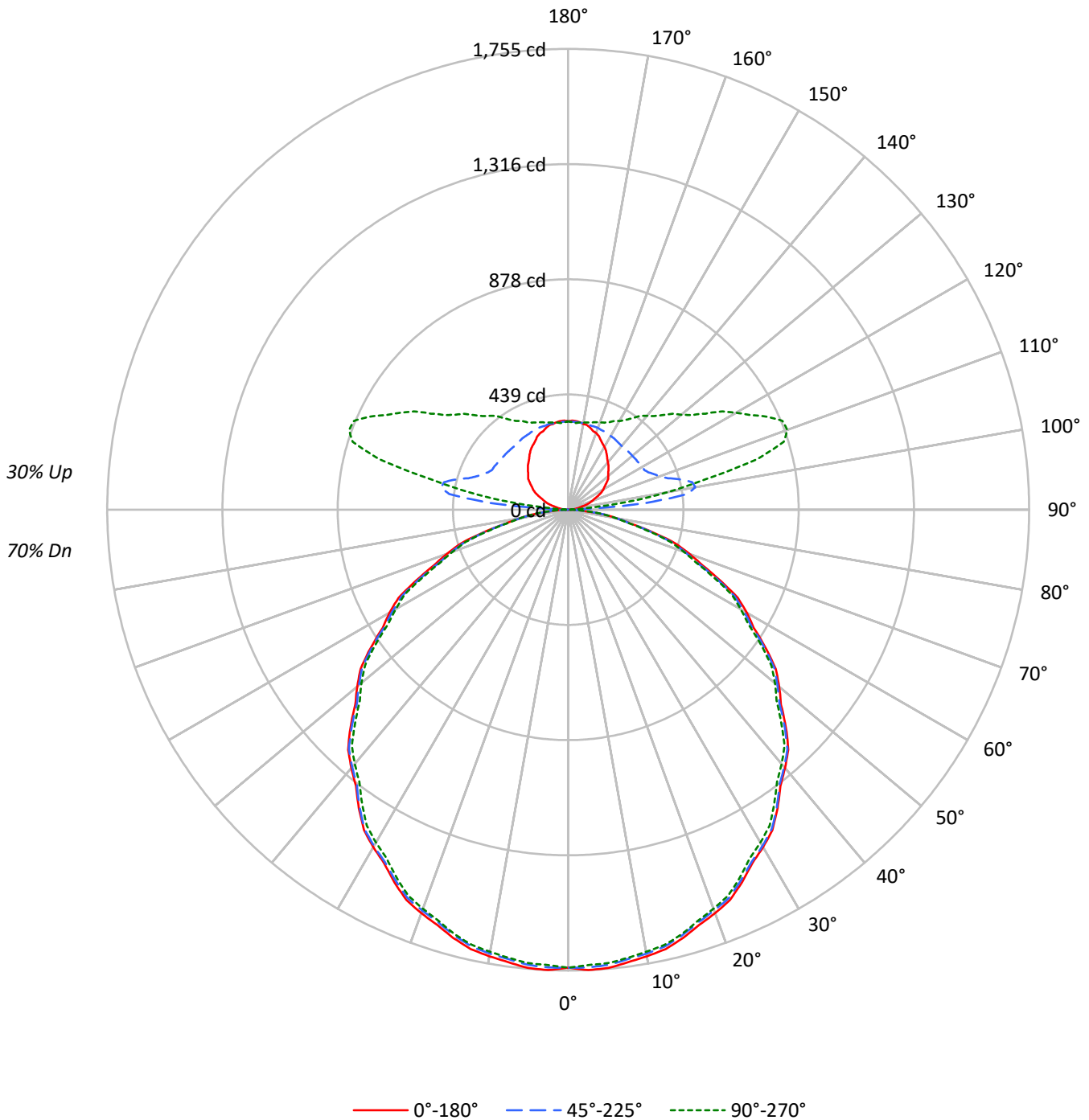
Input Watts (W): 71.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95		84	84	84		75	75	75	70
1	102	98	94	90	96	92	89	86	83	80	78		74	72	70		66	64	63	59
2	93	85	79	73	88	81	75	70	72	68	64		65	61	58		58	55	53	49
3	85	75	67	61	80	71	64	58	64	58	53		57	53	49		51	47	45	41
4	77	66	58	51	73	63	55	49	56	50	45		51	46	42		45	41	38	35
5	71	59	50	44	67	56	48	42	50	44	39		45	40	36		41	37	33	30
6	65	53	44	38	62	50	42	37	45	39	34		41	36	32		37	33	29	26
7	61	48	39	33	57	45	38	32	41	35	30		37	32	28		34	29	26	23
8	56	43	35	30	53	41	34	29	38	31	27		34	29	25		31	26	23	21
9	52	40	32	26	49	38	31	26	35	28	24		31	26	22		28	24	21	19
10	49	36	29	24	46	35	28	23	32	26	22		29	24	20		26	22	19	17

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

	0°	45°	90°
0°	16091	16091	16091
5°	16224	16118	16056
10°	16179	16080	16017
15°	16129	16029	15983
20°	16054	15950	15875
25°	15934	15846	15739
30°	15809	15758	15595
35°	15647	15593	15399
40°	15463	15407	15222
45°	15292	15193	14955
50°	15051	14928	14748
55°	14774	14636	14404
60°	14494	14229	13981
65°	13930	13640	13367
70°	13240	12776	12619
75°	11970	11628	11425
80°	9861	9861	9707
85°	6987	8003	8405

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15292 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.1	2.3
10°-20°	472.7	6.7
20°-30°	715.0	10.1
30°-40°	861.2	12.2
40°-50°	894.1	12.7
50°-60°	810.6	11.5
60°-70°	618.3	8.8
70°-80°	345.8	4.9
80°-90°	89.9	1.3
90°-100°	153.2	2.2
100°-110°	435.9	6.2
110°-120°	417.6	5.9
120°-130°	330.5	4.7
130°-140°	265.3	3.8
140°-150°	207.7	2.9
150°-160°	152.0	2.2
160°-170°	94.1	1.3
170°-180°	31.9	0.5
0°-30°	1352.8	19.2
0°-40°	2214.0	31.4
0°-60°	3918.6	55.5
0°-90°	4972.7	70.4
90°-120°	1006.7	14.3
90°-150°	1810.2	25.6
90°-180°	2088.0	29.6
0°-180°	7061.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1744	1744	1744	1744	1744	
5°	1752	1734	1740	1736	1734	166
15°	1689	1672	1678	1676	1673	476
25°	1565	1549	1557	1545	1546	721
35°	1389	1378	1384	1369	1367	868
45°	1172	1166	1164	1150	1146	903
55°	918	917	910	898	896	820
65°	638	634	625	617	612	633
75°	336	330	326	321	320	355
85°	66	73	76	76	79	82
90°	0	0	0	0	0	3
95°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1744.1	1744.1	1744.1	1744.1	1744.1
2.5°	1754.8	1740.6	1744.9	1741.7	1735.7
5°	1751.8	1734.0	1740.3	1735.5	1733.6
7.5°	1738.4	1721.7	1727.1	1724.2	1721.9
10°	1726.9	1711.0	1716.4	1713.4	1709.7
12.5°	1713.9	1697.2	1703.4	1698.9	1697.4
15°	1688.6	1671.8	1678.1	1676.1	1673.3
17.5°	1658.0	1641.0	1647.5	1643.6	1641.4
20°	1635.1	1617.3	1624.5	1616.9	1616.9
22.5°	1609.0	1591.3	1600.0	1588.6	1590.9
25°	1565.2	1549.3	1556.6	1545.2	1546.1
27.5°	1517.6	1502.6	1512.0	1497.3	1496.7
30°	1483.9	1468.9	1479.1	1462.9	1463.8
32.5°	1446.4	1433.7	1442.4	1426.9	1426.3
35°	1389.2	1378.0	1384.4	1369.0	1367.2
37.5°	1326.8	1318.6	1321.3	1306.7	1305.9
40°	1283.9	1276.5	1279.2	1263.9	1263.9
42.5°	1240.3	1233.6	1235.5	1218.7	1218.7
45°	1172.0	1165.5	1164.4	1149.9	1146.2
47.5°	1099.1	1093.9	1090.5	1077.4	1075.8
50°	1048.6	1044.8	1040.0	1028.5	1027.5
52.5°	995.8	994.3	988.7	976.4	975.5
55°	918.5	916.6	909.9	898.3	895.5
57.5°	837.5	835.7	827.8	816.4	813.6
60°	785.5	779.9	771.1	760.5	757.7
62.5°	728.8	722.5	713.7	704.0	703.4
65°	638.1	634.4	624.8	617.0	612.3
67.5°	552.8	544.4	534.8	528.5	527.5
70°	490.8	482.4	473.6	468.8	467.8
72.5°	428.8	421.9	413.9	409.1	408.9
75°	335.8	330.2	326.2	321.4	320.5
77.5°	243.8	242.3	240.7	235.5	235.5
80°	185.6	185.6	185.6	182.7	182.7
82.5°	133.6	137.3	137.4	136.0	136.0
85°	66.0	72.6	75.6	75.7	79.4
87.5°	18.4	25.1	29.9	30.7	32.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)