

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: P521587

Luminaire Tested: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521587  
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-100U-125D-92765-1D-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

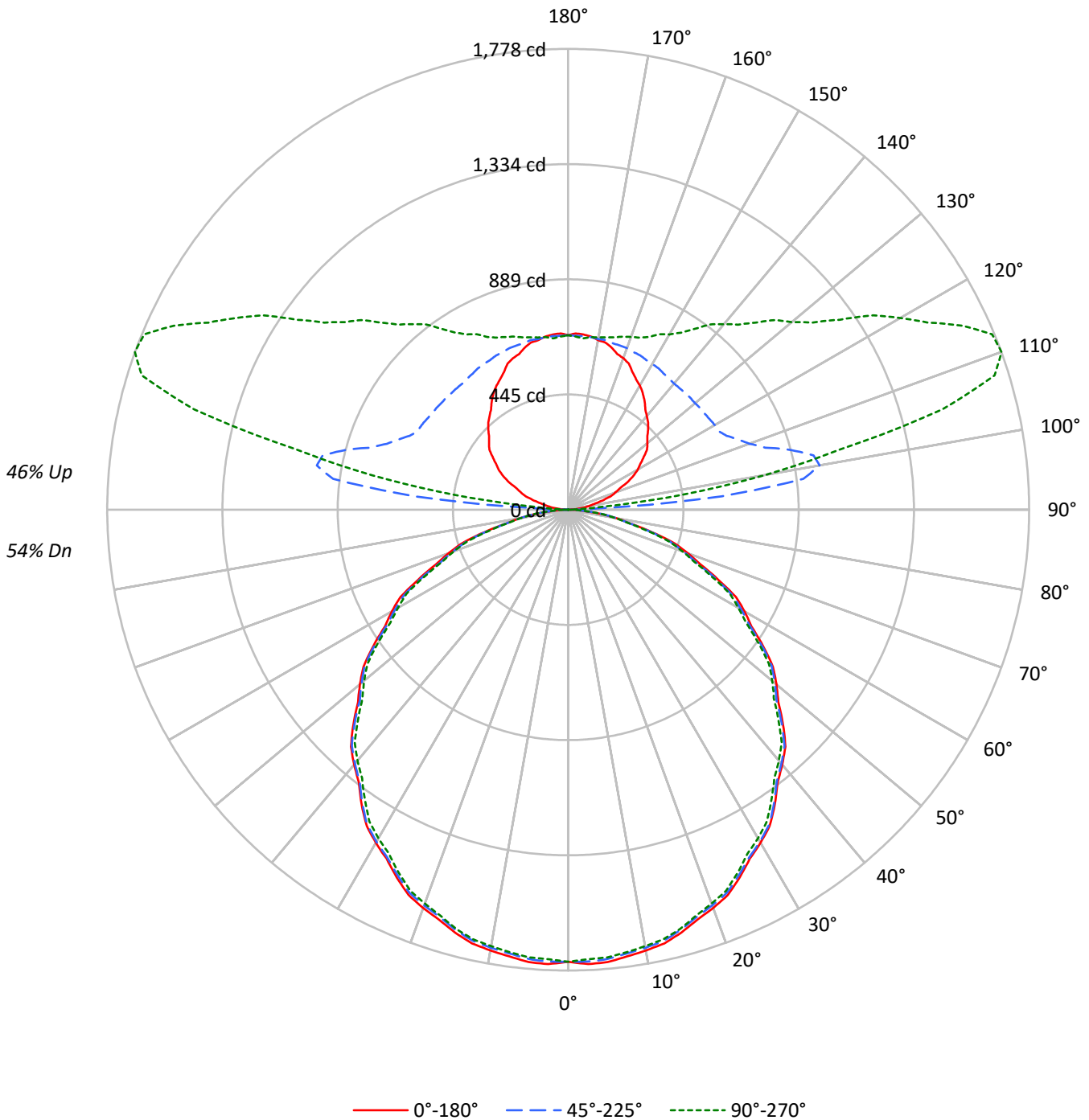
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9156.1 lumens  
Efficiency: N/A  
Efficacy: 104.2 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: General Diffuse  
  
Input Watts (W): 87.9  
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	0
RCR																				
0	108	108	108	108	100	100	100	100	86	86	86		72	72	72		60	60	60	54
1	99	94	90	87	91	87	84	81	75	72	70		63	62	60		53	52	50	45
2	90	82	76	70	83	76	71	66	65	61	58		56	52	50		46	44	42	38
3	82	72	64	58	75	67	60	55	58	53	48		49	45	42		41	38	36	32
4	75	64	55	49	69	59	52	47	51	45	41		43	39	36		36	33	31	27
5	68	57	48	42	63	53	45	40	46	40	35		39	34	31		33	29	27	23
6	63	51	42	36	58	47	40	35	41	35	31		35	30	27		30	26	23	20
7	58	46	38	32	54	43	35	30	37	31	27		32	27	24		27	23	21	18
8	54	41	34	28	50	39	32	27	34	28	24		29	25	21		25	21	18	16
9	50	38	30	25	47	35	29	24	31	25	21		27	22	19		23	19	17	14
10	47	35	27	22	44	33	26	21	29	23	19		25	20	17		21	18	15	13

**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	1.8
10°-20°	472.7	5.2
20°-30°	715.0	7.8
30°-40°	861.2	9.4
40°-50°	894.1	9.8
50°-60°	810.6	8.9
60°-70°	618.3	6.8
70°-80°	345.8	3.8
80°-90°	89.9	1.0
90°-100°	306.9	3.4
100°-110°	873.2	9.5
110°-120°	836.6	9.1
120°-130°	662.1	7.2
130°-140°	531.5	5.8
140°-150°	416.1	4.5
150°-160°	304.4	3.3
160°-170°	188.6	2.1
170°-180°	64.0	0.7
0°-30°	1352.8	14.8
0°-40°	2214.0	24.2
0°-60°	3918.6	42.8
0°-90°	4972.7	54.3
90°-120°	2016.7	22.0
90°-150°	3626.3	39.6
90°-180°	4183.0	45.7
0°-180°	9156.1	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	4
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°	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°	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)