

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: P521433

Luminaire Tested: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521433  
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\_3500K  
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 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

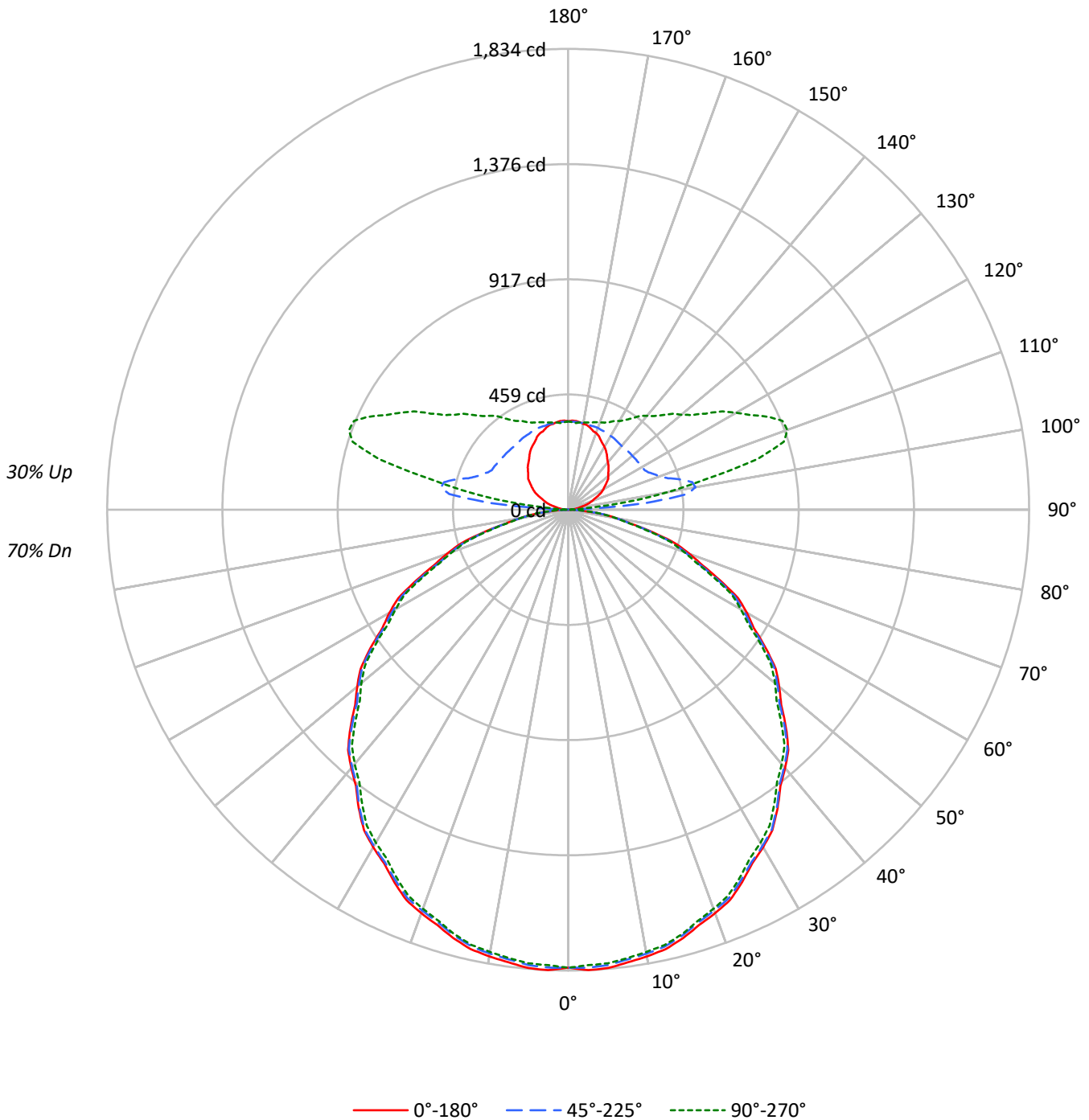
Lumens per Lamp: N/A  
Luminaire Lumens: 7380.3 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 71.6  
Input Voltage (V): 120  
Input Current (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			
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°	16819	16819	16819
5°	16958	16847	16782
10°	16910	16807	16742
15°	16859	16754	16706
20°	16780	16672	16593
25°	16654	16563	16451
30°	16524	16470	16300
35°	16354	16298	16095
40°	16163	16103	15910
45°	15984	15879	15631
50°	15731	15602	15416
55°	15442	15297	15056
60°	15149	14873	14614
65°	14561	14256	13972
70°	13838	13353	13191
75°	12512	12156	11942
80°	10308	10308	10148
85°	7304	8363	8786

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15984 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.5	2.3
10°-20°	494.1	6.7
20°-30°	747.3	10.1
30°-40°	900.1	12.2
40°-50°	934.5	12.7
50°-60°	847.2	11.5
60°-70°	646.3	8.8
70°-80°	361.5	4.9
80°-90°	94.0	1.3
90°-100°	160.1	2.2
100°-110°	455.6	6.2
110°-120°	436.5	5.9
120°-130°	345.5	4.7
130°-140°	277.3	3.8
140°-150°	217.1	2.9
150°-160°	158.8	2.2
160°-170°	98.4	1.3
170°-180°	33.4	0.5
0°-30°	1414.0	19.2
0°-40°	2314.1	31.4
0°-60°	4095.8	55.5
0°-90°	5197.6	70.4
90°-120°	1052.2	14.3
90°-150°	1892.1	25.6
90°-180°	2183.0	29.6
0°-180°	7380.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1831	1812	1819	1814	1812	174
15°	1765	1747	1754	1752	1749	498
25°	1636	1619	1627	1615	1616	754
35°	1452	1440	1447	1431	1429	908
45°	1225	1218	1217	1202	1198	944
55°	960	958	951	939	936	858
65°	667	663	653	645	640	661
75°	351	345	341	336	335	371
85°	69	76	79	79	83	86
90°	0	0	0	0	0	3
95°	17	69	310	107	66	20
105°	71	107	464	820	780	75
115°	132	159	352	746	876	130
125°	186	206	336	558	667	166
135°	227	246	332	471	532	175
145°	268	282	335	408	444	167
155°	306	313	343	368	384	141
165°	338	339	347	354	359	95
175°	354	352	351	349	346	34
180°	351	351	351	351	351	

TEST NUMBER: P521433

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1823.0	1823.0	1823.0	1823.0	1823.0
2.5°	1834.2	1819.3	1823.8	1820.5	1814.2
5°	1831.0	1812.4	1819.0	1814.0	1812.0
7.5°	1817.0	1799.6	1805.2	1802.1	1799.8
10°	1805.0	1788.4	1794.0	1790.9	1787.0
12.5°	1791.4	1774.0	1780.4	1775.8	1774.2
15°	1765.0	1747.4	1754.0	1751.9	1749.0
17.5°	1733.0	1715.2	1722.0	1717.9	1715.6
20°	1709.0	1690.4	1698.0	1690.0	1690.0
22.5°	1681.8	1663.2	1672.4	1660.5	1662.8
25°	1636.0	1619.4	1627.0	1615.0	1616.0
27.5°	1586.2	1570.6	1580.4	1565.0	1564.4
30°	1551.0	1535.4	1546.0	1529.0	1530.0
32.5°	1511.8	1498.5	1507.6	1491.4	1490.8
35°	1452.0	1440.3	1447.0	1431.0	1429.0
37.5°	1386.8	1378.2	1381.0	1365.8	1365.0
40°	1342.0	1334.2	1337.0	1321.0	1321.0
42.5°	1296.4	1289.4	1291.4	1273.8	1273.8
45°	1225.0	1218.2	1217.0	1201.9	1198.0
47.5°	1148.8	1143.3	1139.8	1126.2	1124.4
50°	1096.0	1092.1	1087.0	1075.0	1074.0
52.5°	1040.8	1039.2	1033.4	1020.6	1019.6
55°	960.0	958.0	951.0	938.9	936.0
57.5°	875.4	873.4	865.2	853.3	850.4
60°	821.0	815.1	806.0	794.9	792.0
62.5°	761.8	755.2	746.0	735.8	735.2
65°	667.0	663.1	653.0	644.9	640.0
67.5°	577.8	569.0	559.0	552.4	551.4
70°	513.0	504.2	495.0	490.0	489.0
72.5°	448.2	441.0	432.6	427.6	427.4
75°	351.0	345.1	341.0	336.0	335.0
77.5°	254.8	253.2	251.6	246.2	246.2
80°	194.0	194.0	194.0	191.0	191.0
82.5°	139.6	143.5	143.6	142.2	142.2
85°	69.0	75.8	79.0	79.1	83.0
87.5°	19.2	26.2	31.2	32.1	34.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	28.3	65.7	19.1	14.4
95°	17.4	69.0	310.0	107.3	66.1
97.5°	31.9	80.8	477.4	341.6	234.1
100°	42.1	87.8	513.7	520.4	400.8
102.5°	53.3	95.4	505.7	666.1	561.7
105°	70.8	107.4	464.3	820.1	779.6
107.5°	88.6	121.4	415.9	863.5	899.6
110°	100.9	131.6	388.1	846.9	927.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	112.6	141.8	369.4	807.6	923.1
115°	131.6	159.0	352.1	745.8	875.8
117.5°	148.3	174.0	341.8	678.3	815.9
120°	161.7	183.2	340.7	639.6	771.6
122.5°	172.4	193.9	338.0	605.8	728.3
125°	185.7	206.0	336.0	557.6	666.7
127.5°	200.3	219.2	335.0	528.9	618.7
130°	207.8	226.7	333.4	508.8	587.2
132.5°	215.8	234.2	333.4	493.2	565.3
135°	227.1	246.1	332.0	471.0	532.4
137.5°	237.8	256.2	331.9	452.3	505.3
140°	245.8	264.8	331.3	436.7	487.7
142.5°	254.9	270.7	333.0	424.3	470.0
145°	267.9	281.6	334.7	407.7	444.2
147.5°	279.0	292.3	337.6	390.9	422.5
150°	288.6	297.7	338.7	385.3	407.5
152.5°	296.1	305.7	339.8	377.8	398.4
155°	306.0	313.1	342.7	368.4	383.5
157.5°	318.3	322.6	343.4	364.2	374.9
160°	324.7	327.9	346.0	361.0	370.1
162.5°	328.4	332.2	346.6	358.2	365.3
165°	338.0	339.3	346.7	354.2	359.4
167.5°	344.6	343.4	349.8	353.2	355.3
170°	346.7	346.1	348.7	349.4	352.1
172.5°	351.5	349.3	350.3	348.4	350.5
175°	354.1	352.1	350.7	348.7	346.0
177.5°	355.1	352.0	350.3	348.2	348.7
180°	351.4	351.4	351.4	351.4	351.4

(END OF REPORT)