

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: P521606

Luminaire Tested: SQ4-F-125U-050D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521606  
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-125U-050D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8039.8 lumens  
Efficiency: N/A  
Efficacy: 129.7 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

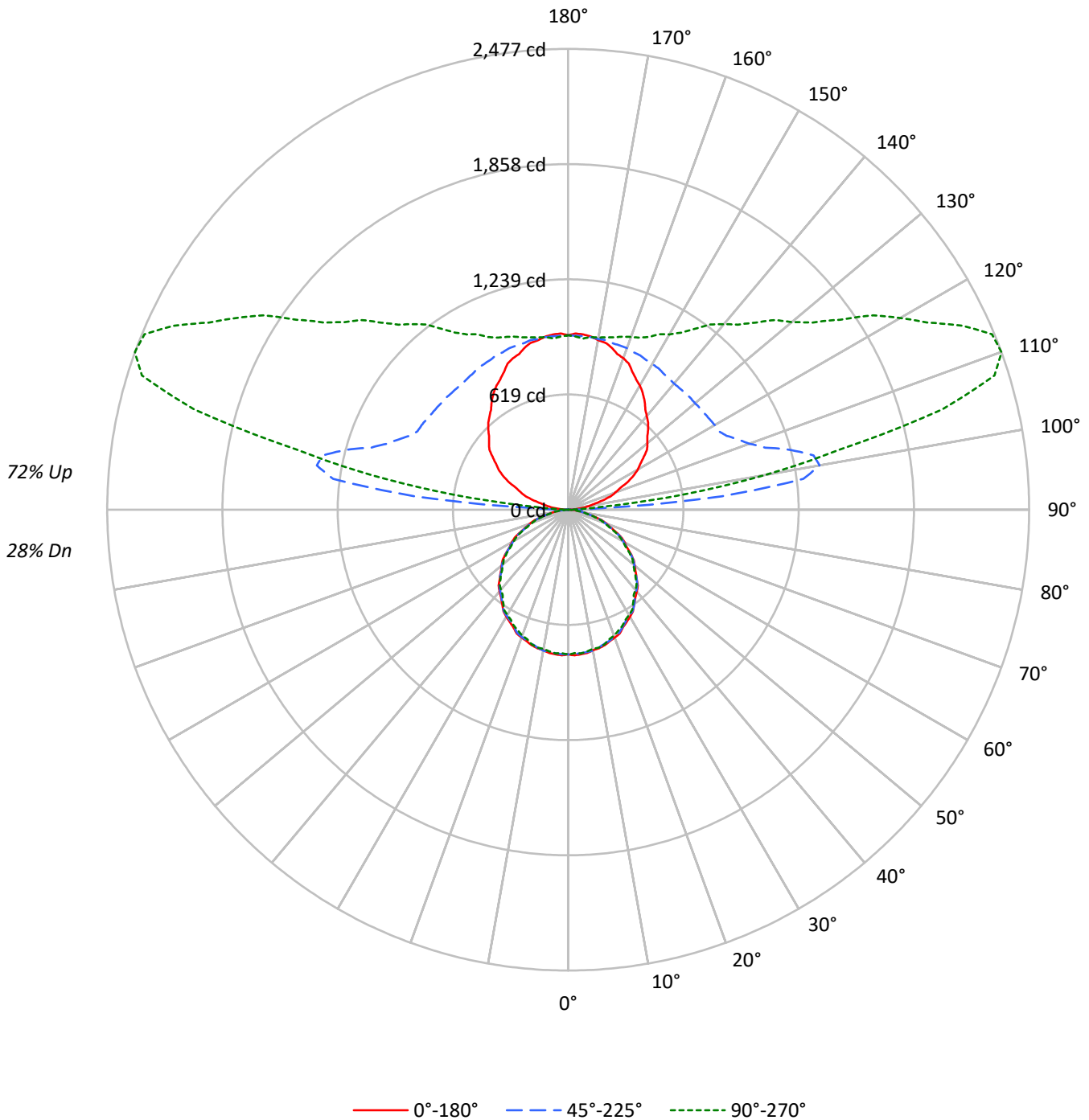
Input Watts (W): 62  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	28
1	93	88	85	81	83	79	76	73	62	60	58	46	45	43	31	30	30	23
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25	19
3	77	68	61	55	68	61	55	50	48	43	40	35	33	30	24	22	21	16
4	70	60	52	46	62	54	47	42	42	37	34	31	28	26	21	20	18	14
5	64	53	45	39	57	48	41	36	37	33	29	28	25	22	19	17	16	12
6	59	47	39	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10
7	54	43	35	29	48	38	32	27	30	25	22	23	19	17	16	14	12	9
8	50	38	31	26	45	35	28	24	28	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	18	15	18	14	12	12	10	9	7

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

	0°	45°	90°
0°	7176	7176	7176
5°	7223	7174	7183
10°	7188	7207	7117
15°	7206	7135	7166
20°	7178	7147	7074
25°	7096	7054	7010
30°	7076	7031	6963
35°	6967	6967	6860
40°	6913	6849	6760
45°	6784	6784	6687
50°	6702	6656	6564
55°	6589	6519	6418
60°	6442	6324	6226
65°	6185	6045	5929
70°	5897	5697	5552
75°	5258	5105	5030
80°	4341	4282	4229
85°	3144	3483	3483

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6784 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	0.9
10°-20°	211.0	2.6
20°-30°	318.7	4.0
30°-40°	383.9	4.8
40°-50°	398.0	5.0
50°-60°	360.9	4.5
60°-70°	274.3	3.4
70°-80°	152.7	1.9
80°-90°	39.4	0.5
90°-100°	427.5	5.3
100°-110°	1216.3	15.1
110°-120°	1165.4	14.5
120°-130°	922.3	11.5
130°-140°	740.3	9.2
140°-150°	579.6	7.2
150°-160°	424.1	5.3
160°-170°	262.7	3.3
170°-180°	89.1	1.1
0°-30°	603.3	7.5
0°-40°	987.2	12.3
0°-60°	1746.1	21.7
0°-90°	2212.6	27.5
90°-120°	2809.1	34.9
90°-150°	5051.4	62.8
90°-180°	5827.0	72.5
0°-180°	8039.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	780	770	775	776	776	74
15°	754	747	747	747	750	213
25°	697	692	693	689	689	323
35°	619	612	619	611	609	388
45°	520	517	520	510	512	402
55°	410	408	405	401	399	365
65°	283	282	277	274	272	281
75°	148	145	143	141	141	157
85°	30	32	33	34	33	36
90°	0	0	0	0	0	3
95°	46	184	828	286	177	53
105°	189	287	1240	2189	2081	200
115°	351	425	940	1991	2338	346
125°	496	550	897	1489	1780	444
135°	606	657	886	1258	1421	468
145°	715	752	894	1088	1186	447
155°	817	836	915	984	1024	378
165°	902	906	926	946	960	254
175°	945	940	936	931	924	90
180°	938	938	938	938	938	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	777.8	777.8	777.8	777.8	777.8
2.5°	783.7	775.4	776.9	777.6	771.8
5°	779.9	770.5	774.6	775.6	775.6
7.5°	776.5	769.2	771.8	768.6	768.2
10°	767.2	764.0	769.3	761.8	759.7
12.5°	762.9	758.1	759.1	757.6	759.7
15°	754.4	747.2	747.0	747.1	750.2
17.5°	741.3	731.9	738.1	731.5	730.7
20°	731.1	721.7	727.9	720.5	720.5
22.5°	720.9	709.9	716.0	706.0	703.5
25°	697.1	691.9	692.9	688.6	688.6
27.5°	680.4	668.9	672.7	666.8	667.2
30°	664.2	652.8	660.0	651.5	653.6
32.5°	648.1	640.8	644.7	635.5	639.2
35°	618.6	612.4	618.6	611.1	609.1
37.5°	592.7	586.3	588.3	583.5	578.3
40°	574.0	566.8	568.7	562.3	561.3
42.5°	553.7	548.9	549.2	543.7	544.3
45°	519.9	516.8	519.9	510.4	512.5
47.5°	489.8	486.1	485.8	479.4	481.9
50°	466.9	464.8	463.7	457.3	457.3
52.5°	443.1	441.0	439.9	435.2	434.4
55°	409.6	408.5	405.3	401.0	399.0
57.5°	372.9	370.8	369.0	364.5	362.9
60°	349.1	347.0	342.7	337.4	337.4
62.5°	322.8	320.7	315.6	313.6	310.3
65°	283.3	282.3	276.9	273.7	271.6
67.5°	244.0	240.7	238.3	234.2	232.2
70°	218.6	214.4	211.2	207.9	205.8
72.5°	190.6	187.2	184.0	182.4	179.5
75°	147.5	145.4	143.2	141.1	141.1
77.5°	107.2	106.5	104.4	104.4	103.3
80°	81.7	82.7	80.6	80.6	79.6
82.5°	58.8	59.8	59.4	60.2	59.2
85°	29.7	31.8	32.9	33.9	32.9
87.5°	8.5	11.0	12.7	13.6	13.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.3	75.7	175.5	51.1	38.5
95°	46.4	184.1	827.5	286.4	176.6
97.5°	85.2	215.7	1274.5	912.0	624.9
100°	112.4	234.4	1371.5	1389.2	1070.1
102.5°	142.3	254.6	1350.1	1778.2	1499.5
105°	189.0	286.7	1239.5	2189.4	2081.3
107.5°	236.5	324.0	1110.4	2305.4	2401.6
110°	269.3	351.3	1036.2	2261.0	2477.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	300.7	378.5	986.3	2156.1	2464.4
115°	351.3	424.6	939.9	1991.1	2338.1
117.5°	395.9	464.6	912.4	1810.7	2178.3
120°	431.6	489.1	909.6	1707.7	2059.9
122.5°	460.1	517.7	902.4	1617.2	1944.3
125°	495.8	549.9	897.1	1488.7	1779.9
127.5°	534.7	585.3	894.2	1411.9	1651.8
130°	554.7	605.2	890.0	1358.4	1567.7
132.5°	576.1	625.2	890.0	1316.7	1509.2
135°	606.4	657.0	886.4	1257.5	1421.4
137.5°	634.9	684.1	886.0	1207.4	1349.0
140°	656.3	706.9	884.6	1165.9	1301.9
142.5°	680.6	722.8	888.9	1132.8	1254.8
145°	715.2	751.8	893.5	1088.4	1186.0
147.5°	744.8	780.4	901.4	1043.5	1127.9
150°	770.5	794.9	904.2	1028.6	1087.9
152.5°	790.4	816.2	907.1	1008.6	1063.7
155°	816.8	836.0	914.9	983.6	1023.7
157.5°	849.6	861.2	916.7	972.3	1000.9
160°	866.8	875.5	923.8	963.6	988.0
162.5°	876.8	886.9	925.3	956.4	975.2
165°	902.4	905.9	925.6	945.6	959.5
167.5°	919.9	916.8	933.8	942.9	948.4
170°	925.6	923.9	931.0	932.9	939.9
172.5°	938.5	932.5	935.3	930.0	935.6
175°	945.2	940.0	936.3	930.8	923.8
177.5°	948.1	939.7	935.3	929.6	931.0
180°	938.1	938.1	938.1	938.1	938.1

(END OF REPORT)