

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: P521618

Luminaire Tested: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521618  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9012.5 lumens  
Efficiency: N/A  
Efficacy: 123.1 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-Indirect

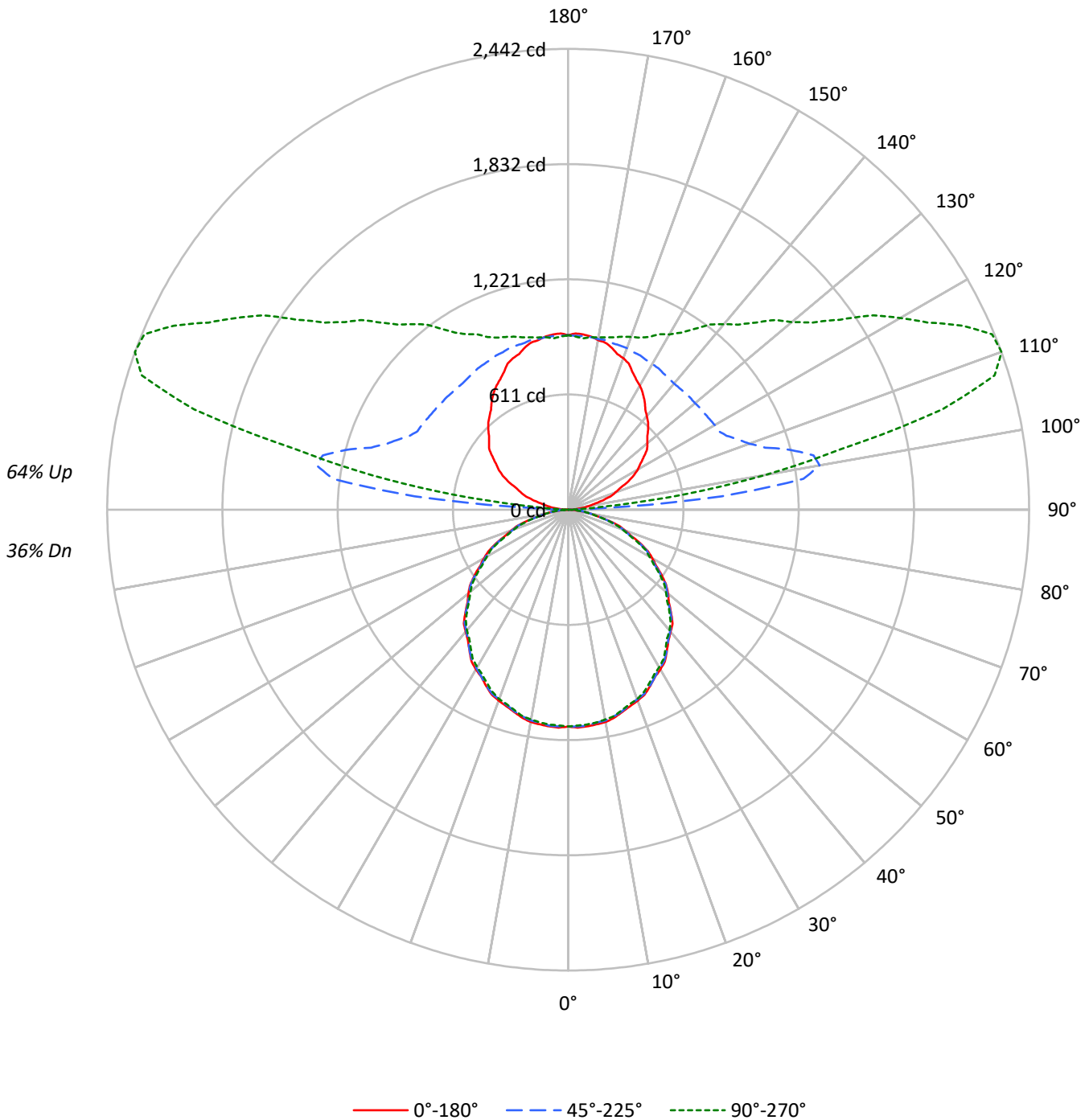
Input Watts (W): 73.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36				
1	95	90	86	83	86	82	79	76	66	64	62	52	50	49	38	37	37	30				
2	86	79	73	68	78	71	66	62	58	54	51	45	43	41	34	32	31	25				
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	30	28	26	21				
4	72	61	53	47	64	55	49	43	45	40	36	35	32	29	26	24	22	18				
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16				
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14				
7	56	44	36	30	50	40	33	28	33	27	24	26	22	19	19	17	15	12				
8	52	39	32	27	47	36	29	25	30	24	21	24	20	17	18	15	13	11				
9	48	36	29	24	43	33	26	22	27	22	18	22	18	15	16	14	12	10				
10	45	33	26	21	40	30	24	19	25	20	17	20	16	14	15	13	11	9				

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

	0°	45°	90°
0°	10598	10598	10598
5°	10678	10639	10580
10°	10703	10624	10575
15°	10592	10553	10502
20°	10569	10498	10487
25°	10479	10458	10341
30°	10410	10342	10265
35°	10263	10252	10122
40°	10169	10118	10054
45°	10047	9992	9882
50°	9911	9835	9700
55°	9727	9609	9474
60°	9497	9342	9169
65°	9182	8975	8815
70°	8608	8411	8211
75°	7757	7532	7422
80°	6339	6392	6280
85°	4541	5208	5208

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10047 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.8	1.2
10°-20°	311.3	3.5
20°-30°	471.0	5.2
30°-40°	566.5	6.3
40°-50°	588.1	6.5
50°-60°	532.8	5.9
60°-70°	405.3	4.5
70°-80°	225.3	2.5
80°-90°	58.0	0.6
90°-100°	421.5	4.7
100°-110°	1199.2	13.3
110°-120°	1149.0	12.7
120°-130°	909.4	10.1
130°-140°	729.9	8.1
140°-150°	571.4	6.3
150°-160°	418.1	4.6
160°-170°	259.0	2.9
170°-180°	87.9	1.0
0°-30°	891.1	9.9
0°-40°	1457.6	16.2
0°-60°	2578.5	28.6
0°-90°	3267.2	36.3
90°-120°	2769.7	30.7
90°-150°	4980.4	55.3
90°-180°	5745.0	63.7
0°-180°	9012.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1153	1143	1149	1143	1142	110
15°	1109	1100	1105	1104	1100	314
25°	1029	1020	1027	1017	1016	474
35°	911	907	910	900	899	571
45°	770	765	766	757	757	594
55°	605	604	597	592	589	540
65°	421	414	411	405	404	414
75°	218	214	211	209	208	230
85°	43	46	49	49	49	53
90°	0	0	0	0	0	4
95°	46	182	816	282	174	52
105°	186	283	1222	2159	2052	197
115°	346	419	927	1963	2305	341
125°	489	542	884	1468	1755	438
135°	598	648	874	1240	1402	461
145°	705	741	881	1073	1169	440
155°	805	824	902	970	1009	372
165°	890	893	913	932	946	250
175°	932	927	923	918	911	88
180°	925	925	925	925	925	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1148.7	1148.7	1148.7	1148.7	1148.7
2.5°	1156.2	1146.4	1149.5	1147.0	1144.5
5°	1152.9	1142.7	1148.7	1143.4	1142.4
7.5°	1147.4	1135.4	1138.2	1137.2	1137.2
10°	1142.4	1127.1	1134.0	1128.8	1128.8
12.5°	1129.0	1116.1	1121.5	1118.8	1120.4
15°	1108.9	1099.7	1104.8	1103.6	1099.5
17.5°	1091.6	1080.5	1084.3	1082.3	1080.7
20°	1076.5	1066.3	1069.2	1064.0	1068.1
22.5°	1059.8	1049.5	1055.0	1046.4	1046.4
25°	1029.4	1020.2	1027.3	1016.9	1015.8
27.5°	997.2	991.3	996.0	988.1	985.3
30°	977.1	967.9	970.8	965.6	963.5
32.5°	953.7	944.5	947.4	938.0	939.3
35°	911.2	907.1	910.2	899.7	898.7
37.5°	872.7	864.5	869.4	860.8	860.0
40°	844.3	836.1	840.1	834.8	834.8
42.5°	818.3	809.3	811.6	804.7	802.2
45°	770.0	764.9	765.8	757.4	757.4
47.5°	722.3	718.6	717.0	708.5	710.1
50°	690.5	684.3	685.2	675.8	675.8
52.5°	653.6	654.1	650.1	643.9	639.0
55°	604.7	603.7	597.4	592.1	589.0
57.5°	552.4	547.7	543.2	536.0	535.4
60°	514.7	511.6	506.3	500.0	496.9
62.5°	476.2	473.1	467.8	462.4	461.8
65°	420.6	414.4	411.1	404.8	403.8
67.5°	360.1	355.2	351.1	346.1	345.4
70°	319.1	315.0	311.8	307.5	304.4
72.5°	281.4	274.9	271.6	268.2	265.9
75°	217.6	214.5	211.3	209.2	208.2
77.5°	156.1	156.3	156.3	153.6	152.5
80°	119.3	120.3	120.3	119.2	118.2
82.5°	86.6	88.5	89.3	88.3	88.1
85°	42.9	46.0	49.2	49.2	49.2
87.5°	11.7	15.8	19.2	20.1	19.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.1	74.6	173.0	50.4	38.0
95°	45.7	181.5	815.9	282.4	174.1
97.5°	84.1	212.7	1256.6	899.2	616.2
100°	110.8	231.1	1352.2	1369.7	1055.1
102.5°	140.3	251.0	1331.1	1753.2	1478.5
105°	186.4	282.7	1222.1	2158.7	2052.1
107.5°	233.2	319.5	1094.8	2273.0	2367.9
110°	265.5	346.3	1021.6	2229.2	2442.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	296.5	373.2	972.4	2125.8	2429.8
115°	346.4	418.6	926.7	1963.1	2305.3
117.5°	390.4	458.1	899.6	1785.3	2147.7
120°	425.5	482.3	896.8	1683.7	2031.0
122.5°	453.7	510.4	889.8	1594.5	1917.0
125°	488.8	542.1	884.5	1467.8	1754.9
127.5°	527.2	577.0	881.7	1392.1	1628.7
130°	546.9	596.7	877.5	1339.3	1545.7
132.5°	568.0	616.5	877.5	1298.2	1488.0
135°	597.9	647.7	873.9	1239.8	1401.5
137.5°	626.0	674.5	873.6	1190.5	1330.1
140°	647.1	697.0	872.2	1149.5	1283.6
142.5°	671.0	712.6	876.4	1116.9	1237.2
145°	705.1	741.2	881.0	1073.1	1169.4
147.5°	734.3	769.4	888.7	1028.8	1112.0
150°	759.6	783.7	891.5	1014.2	1072.6
152.5°	779.3	804.8	894.3	994.4	1048.7
155°	805.4	824.3	902.1	969.8	1009.3
157.5°	837.7	849.1	903.8	958.6	986.8
160°	854.6	863.2	910.9	950.1	974.2
162.5°	864.4	874.4	912.3	942.9	961.5
165°	889.8	893.2	912.6	932.3	946.0
167.5°	907.0	903.9	920.7	929.6	935.1
170°	912.6	910.9	917.9	919.8	926.7
172.5°	925.3	919.4	922.1	917.0	922.5
175°	932.0	926.8	923.2	917.7	910.9
177.5°	934.8	926.5	922.1	916.5	917.9
180°	924.9	924.9	924.9	924.9	924.9

(END OF REPORT)