

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: P521372

Luminaire Tested: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521372  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 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: 6411.1 lumens  
Efficiency: N/A  
Efficacy: 113.9 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

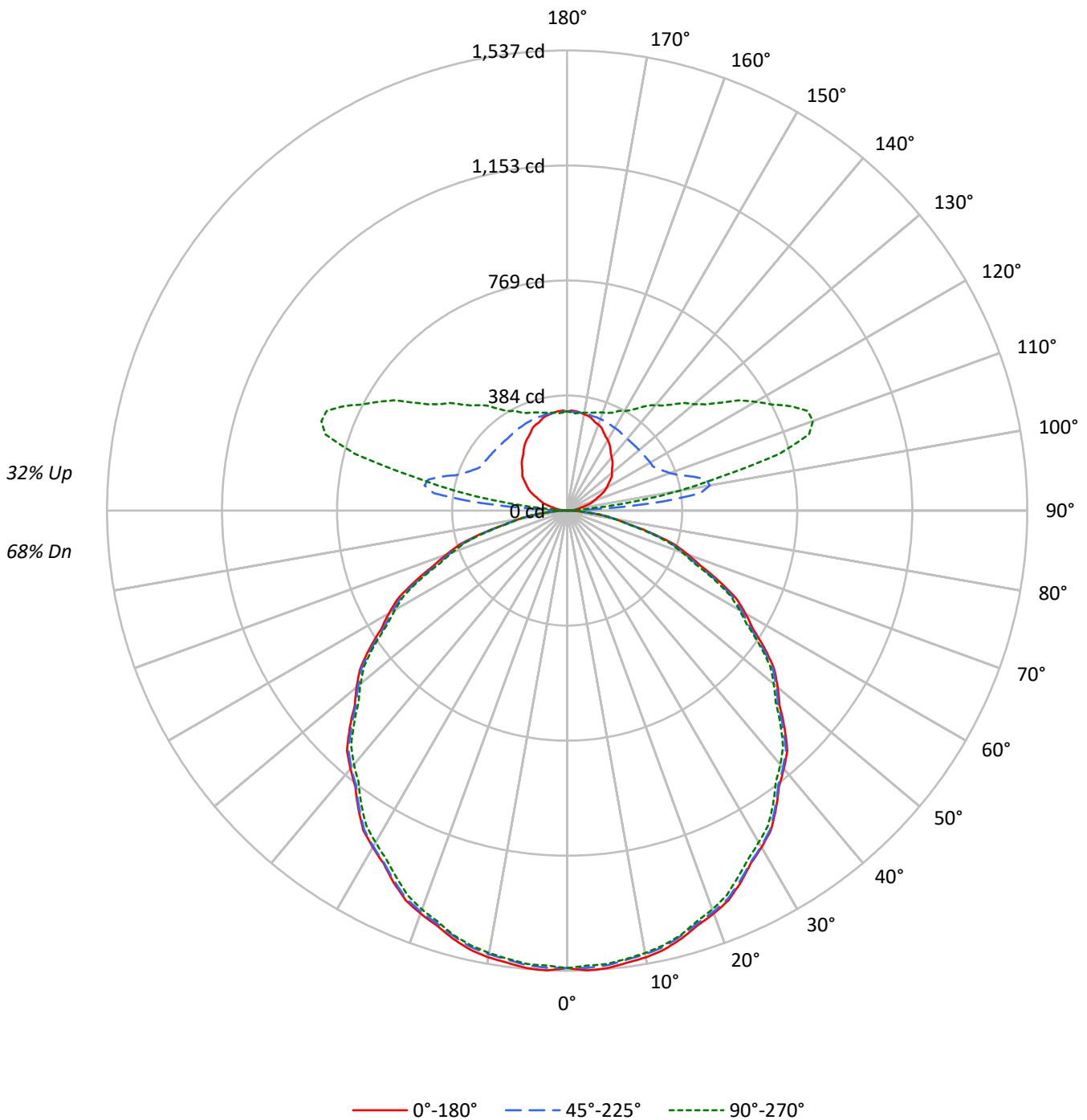
Input Watts (W): 56.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68																				
1	102	97	93	89	96	92	88	85	82	79	76	72	70	68	64	62	61	57																				
2	92	85	78	73	87	80	74	69	71	67	63	63	60	57	56	53	51	47																				
3	84	74	66	60	79	70	63	58	63	57	53	56	51	48	49	46	43	40																				
4	77	66	57	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34																				
5	71	58	50	44	66	55	48	42	50	43	39	44	39	35	40	35	32	29																				
6	65	52	44	38	61	50	42	36	45	38	34	40	35	31	36	32	28	26																				
7	60	47	39	33	57	45	37	32	41	34	30	37	31	27	33	28	25	23																				
8	56	43	35	29	53	41	34	28	37	31	26	33	28	24	30	26	22	20																				
9	52	39	32	26	49	37	30	25	34	28	24	31	26	22	28	23	20	18																				
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	26	21	18	16																				

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

	0°	45°	90°
0°	14097	14097	14097
5°	14210	14122	14082
10°	14195	14096	14057
15°	14128	14047	14017
20°	14064	14002	13918
25°	13956	13902	13750
30°	13836	13803	13633
35°	13696	13648	13504
40°	13559	13508	13342
45°	13401	13291	13139
50°	13174	13083	12930
55°	12989	12801	12648
60°	12688	12433	12256
65°	12278	11931	11745
70°	11564	11192	10993
75°	10441	10174	10024
80°	8623	8623	8512
85°	6066	6966	7188

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13401 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.7	2.3
10°-20°	414.4	6.5
20°-30°	626.6	9.8
30°-40°	754.6	11.8
40°-50°	783.7	12.2
50°-60°	710.4	11.1
60°-70°	541.0	8.4
70°-80°	302.3	4.7
80°-90°	78.4	1.2
90°-100°	150.8	2.4
100°-110°	428.9	6.7
110°-120°	411.0	6.4
120°-130°	325.3	5.1
130°-140°	261.1	4.1
140°-150°	204.4	3.2
150°-160°	149.6	2.3
160°-170°	92.6	1.4
170°-180°	31.4	0.5
0°-30°	1185.7	18.5
0°-40°	1940.3	30.3
0°-60°	3434.3	53.6
0°-90°	4356.0	67.9
90°-120°	990.7	15.5
90°-150°	1781.4	27.8
90°-180°	2055.0	32.1
0°-180°	6411.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1534	1520	1525	1520	1520	146
15°	1479	1466	1471	1468	1468	417
25°	1371	1360	1366	1355	1351	631
35°	1216	1209	1212	1200	1199	761
45°	1027	1021	1019	1008	1007	791
55°	808	804	796	786	786	720
65°	562	556	546	539	538	554
75°	293	289	285	281	281	310
85°	57	61	66	67	68	71
90°	0	0	0	0	0	3
95°	16	65	292	101	62	19
105°	67	101	437	772	734	71
115°	124	150	332	702	825	122
125°	175	194	316	525	628	157
135°	214	232	313	444	501	165
145°	252	265	315	384	418	158
155°	288	295	323	347	361	133
165°	318	320	326	334	338	90
175°	333	332	330	328	326	32
180°	331	331	331	331	331	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1527.9	1527.9	1527.9	1527.9	1527.9
2.5°	1537.3	1524.8	1528.8	1526.1	1521.1
5°	1534.3	1519.8	1524.8	1520.5	1520.5
7.5°	1523.7	1509.8	1513.1	1510.5	1510.5
10°	1515.2	1499.6	1504.6	1500.4	1500.4
12.5°	1501.6	1487.7	1492.7	1488.5	1487.6
15°	1479.1	1465.6	1470.6	1467.5	1467.5
17.5°	1452.0	1439.1	1445.6	1440.5	1438.8
20°	1432.4	1417.9	1426.1	1417.6	1417.6
22.5°	1408.7	1395.8	1403.2	1392.9	1391.3
25°	1370.9	1359.5	1365.6	1354.9	1350.7
27.5°	1328.5	1316.2	1325.3	1313.3	1311.1
30°	1298.7	1287.3	1295.6	1282.8	1279.7
32.5°	1266.5	1256.7	1262.5	1250.5	1248.2
35°	1216.0	1208.7	1211.7	1200.0	1199.0
37.5°	1162.3	1155.2	1158.1	1145.1	1144.3
40°	1125.8	1119.6	1121.6	1107.8	1107.8
42.5°	1088.4	1081.4	1081.7	1068.7	1067.9
45°	1027.1	1020.9	1018.6	1008.0	1007.0
47.5°	962.0	959.1	955.6	945.0	945.0
50°	917.8	915.8	911.5	900.8	900.8
52.5°	872.8	871.6	865.6	856.7	855.0
55°	807.5	804.4	795.8	786.3	786.3
57.5°	736.0	733.5	723.9	716.2	714.3
60°	687.6	683.4	673.8	665.3	664.2
62.5°	637.5	634.2	623.7	616.0	614.1
65°	562.4	556.1	546.5	539.0	538.0
67.5°	483.0	475.9	467.5	461.3	459.2
70°	428.7	422.4	414.9	409.5	407.5
72.5°	375.2	369.0	362.2	358.6	358.2
75°	292.9	288.7	285.4	281.2	281.2
77.5°	212.4	209.9	208.2	206.1	206.1
80°	162.3	162.3	162.3	160.2	160.2
82.5°	116.5	119.0	120.7	119.5	119.5
85°	57.3	61.4	65.8	66.9	67.9
87.5°	16.1	21.1	26.3	27.2	28.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.0	26.7	61.9	18.0	13.6
95°	16.4	64.9	291.8	101.0	62.3
97.5°	30.1	76.1	449.5	321.6	220.4
100°	39.6	82.7	483.7	489.9	377.4
102.5°	50.2	89.8	476.1	627.1	528.8
105°	66.7	101.1	437.1	772.1	734.0
107.5°	83.4	114.3	391.6	813.0	847.0
110°	95.0	123.9	365.4	797.4	873.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	106.0	133.5	347.8	760.4	869.1
115°	123.9	149.7	331.5	702.2	824.6
117.5°	139.6	163.9	321.8	638.6	768.2
120°	152.2	172.5	320.8	602.2	726.4
122.5°	162.3	182.6	318.3	570.3	685.7
125°	174.8	193.9	316.4	525.0	627.7
127.5°	188.6	206.4	315.4	497.9	582.5
130°	195.6	213.4	313.8	479.1	552.9
132.5°	203.2	220.5	313.8	464.3	532.2
135°	213.8	231.7	312.6	443.5	501.3
137.5°	223.9	241.3	312.5	425.8	475.7
140°	231.5	249.3	312.0	411.2	459.1
142.5°	240.0	254.9	313.5	399.5	442.5
145°	252.2	265.1	315.1	383.8	418.3
147.5°	262.7	275.2	317.9	368.0	397.8
150°	271.7	280.3	318.9	362.8	383.7
152.5°	278.8	287.9	319.9	355.7	375.1
155°	288.1	294.8	322.7	346.9	361.0
157.5°	299.6	303.7	323.3	342.9	353.0
160°	305.7	308.7	325.8	339.8	348.4
162.5°	309.2	312.8	326.3	337.3	343.9
165°	318.3	319.5	326.4	333.5	338.4
167.5°	324.4	323.3	329.3	332.5	334.5
170°	326.4	325.8	328.3	329.0	331.5
172.5°	331.0	328.9	329.8	328.0	329.9
175°	333.3	331.5	330.2	328.3	325.8
177.5°	334.4	331.4	329.8	327.8	328.3
180°	330.8	330.8	330.8	330.8	330.8

(END OF REPORT)