

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: P521633

Luminaire Tested: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521633  
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-125U-100D-92765-1D-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10279.8 lumens  
Efficiency: N/A  
Efficacy: 123.4 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

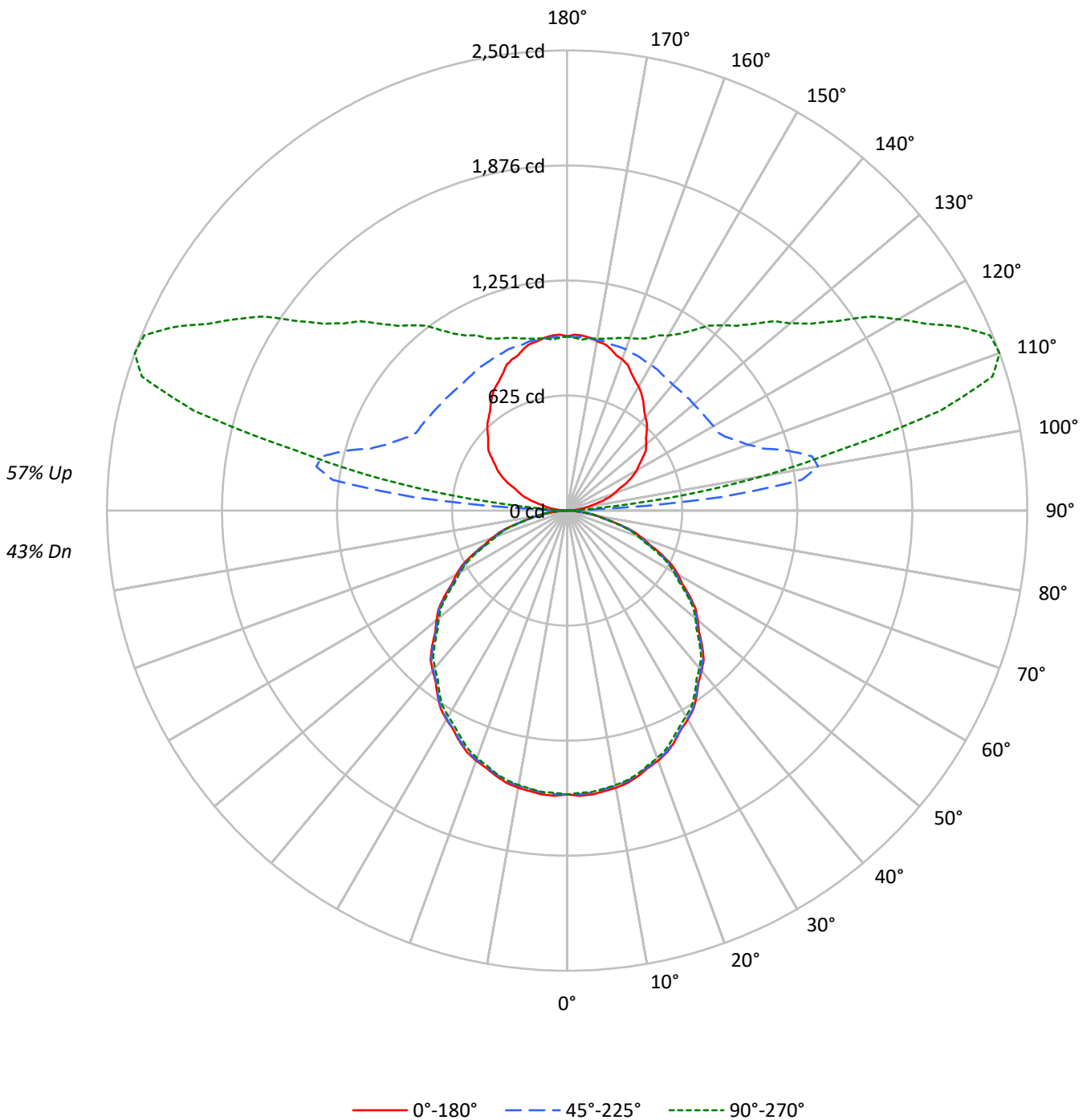
Input Watts (W): 83.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43																				
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	44	43	42	36																				
2	87	80	74	69	79	73	68	63	61	57	53	49	46	44	38	36	35	30																				
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	29	25																				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	31	30	27	25	21																				
5	67	55	47	41	61	51	43	38	42	37	33	34	30	27	27	24	22	18																				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13																				
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	19	16	14	11																				
10	45	33	26	22	42	31	25	20	26	21	18	22	18	15	17	14	12	10																				

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

	0°	45°	90°
0°	14230	14230	14230
5°	14345	14255	14215
10°	14330	14230	14190
15°	14263	14180	14150
20°	14197	14134	14050
25°	14088	14033	13880
30°	13968	13934	13762
35°	13825	13777	13633
40°	13688	13636	13469
45°	13529	13417	13263
50°	13298	13207	13053
55°	13111	12921	12767
60°	12808	12551	12372
65°	12393	12042	11856
70°	11672	11297	11095
75°	10537	10270	10117
80°	8708	8708	8591
85°	6119	7029	7262

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13529 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.0	1.4
10°-20°	418.3	4.1
20°-30°	632.6	6.2
30°-40°	761.7	7.4
40°-50°	791.1	7.7
50°-60°	717.1	7.0
60°-70°	546.1	5.3
70°-80°	305.1	3.0
80°-90°	79.2	0.8
90°-100°	431.5	4.2
100°-110°	1227.8	11.9
110°-120°	1176.4	11.4
120°-130°	931.1	9.1
130°-140°	747.3	7.3
140°-150°	585.1	5.7
150°-160°	428.1	4.2
160°-170°	265.2	2.6
170°-180°	90.0	0.9
0°-30°	1196.9	11.6
0°-40°	1958.6	19.1
0°-60°	3466.9	33.7
0°-90°	4397.3	42.8
90°-120°	2835.8	27.6
90°-150°	5099.2	49.6
90°-180°	5882.0	57.2
0°-180°	10279.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1549	1534	1539	1535	1535	147
15°	1493	1480	1485	1481	1481	421
25°	1384	1372	1378	1368	1364	637
35°	1228	1220	1223	1211	1210	768
45°	1037	1031	1028	1018	1016	799
55°	815	812	803	794	794	727
65°	568	561	552	544	543	560
75°	296	291	288	284	284	313
85°	58	62	66	68	69	72
90°	0	0	0	0	0	4
95°	47	186	835	289	178	54
105°	191	289	1251	2210	2101	202
115°	355	429	949	2010	2360	349
125°	500	555	906	1503	1797	448
135°	612	663	895	1269	1435	472
145°	722	759	902	1099	1197	451
155°	825	844	924	993	1033	381
165°	911	914	934	954	969	256
175°	954	949	945	940	933	90
180°	947	947	947	947	947	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1551.9	1539.3	1543.3	1540.6	1535.6
5°	1548.9	1534.2	1539.2	1534.9	1534.9
7.5°	1538.1	1524.1	1527.4	1524.9	1524.9
10°	1529.6	1513.9	1518.9	1514.6	1514.6
12.5°	1515.9	1501.8	1506.9	1502.6	1501.7
15°	1493.2	1479.5	1484.6	1481.4	1481.4
17.5°	1465.7	1452.7	1459.3	1454.1	1452.5
20°	1446.0	1431.4	1439.6	1431.0	1431.0
22.5°	1422.0	1409.0	1416.5	1406.1	1404.5
25°	1383.9	1372.4	1378.5	1367.7	1363.5
27.5°	1341.1	1328.7	1337.8	1325.8	1323.5
30°	1311.1	1299.5	1307.9	1294.9	1291.8
32.5°	1278.5	1268.7	1274.4	1262.4	1260.1
35°	1227.5	1220.2	1223.2	1211.4	1210.4
37.5°	1173.3	1166.2	1169.0	1155.9	1155.1
40°	1136.5	1130.2	1132.2	1118.3	1118.3
42.5°	1098.8	1091.6	1091.9	1078.8	1078.0
45°	1036.9	1030.6	1028.3	1017.6	1016.5
47.5°	971.1	968.2	964.7	953.9	953.9
50°	926.5	924.4	920.1	909.4	909.4
52.5°	881.1	879.9	873.8	864.8	863.1
55°	815.1	812.0	803.3	793.7	793.7
57.5°	742.9	740.4	730.7	723.0	721.1
60°	694.1	689.9	680.2	671.6	670.5
62.5°	643.5	640.2	629.6	621.9	620.0
65°	567.7	561.4	551.6	544.1	543.1
67.5°	487.6	480.5	471.9	465.7	463.6
70°	432.7	426.5	418.8	413.4	411.3
72.5°	378.8	372.5	365.7	362.0	361.6
75°	295.6	291.4	288.1	283.8	283.8
77.5°	214.4	211.9	210.2	208.0	208.0
80°	163.9	163.9	163.9	161.7	161.7
82.5°	117.6	120.1	121.9	120.6	120.6
85°	57.8	62.0	66.4	67.5	68.6
87.5°	16.3	21.3	26.6	27.4	28.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.4	76.4	177.2	51.6	38.9
95°	46.8	185.9	835.4	289.1	178.2
97.5°	86.1	217.7	1286.6	920.6	630.9
100°	113.4	236.6	1384.5	1402.4	1080.2
102.5°	143.7	257.0	1362.9	1795.1	1513.8
105°	190.8	289.4	1251.3	2210.2	2101.0
107.5°	238.7	327.1	1120.9	2327.2	2424.4
110°	271.9	354.6	1046.0	2282.4	2500.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	303.5	382.1	995.6	2176.5	2487.8
115°	354.7	428.6	948.8	2010.0	2360.3
117.5°	399.7	469.0	921.1	1827.9	2199.0
120°	435.7	493.8	918.2	1723.8	2079.4
122.5°	464.5	522.6	911.0	1632.5	1962.8
125°	500.5	555.1	905.6	1502.8	1796.8
127.5°	539.8	590.8	902.7	1425.3	1667.5
130°	559.9	611.0	898.4	1371.3	1582.5
132.5°	581.5	631.2	898.4	1329.1	1523.5
135°	612.1	663.2	894.8	1269.4	1434.9
137.5°	640.9	690.6	894.4	1218.9	1361.8
140°	662.5	713.6	893.0	1177.0	1314.3
142.5°	687.0	729.6	897.3	1143.5	1266.7
145°	722.0	758.9	902.0	1098.7	1197.3
147.5°	751.8	787.8	909.9	1053.4	1138.6
150°	777.8	802.4	912.8	1038.4	1098.2
152.5°	797.9	824.0	915.7	1018.1	1073.7
155°	824.6	843.9	923.6	992.9	1033.4
157.5°	857.7	869.3	925.4	981.5	1010.4
160°	875.0	883.8	932.6	972.8	997.4
162.5°	885.1	895.3	934.0	965.4	984.4
165°	911.0	914.5	934.4	954.5	968.6
167.5°	928.6	925.5	942.7	951.8	957.4
170°	934.4	932.6	939.8	941.8	948.8
172.5°	947.4	941.4	944.1	938.8	944.5
175°	954.2	948.9	945.2	939.6	932.6
177.5°	957.1	948.6	944.1	938.4	939.8
180°	947.0	947.0	947.0	947.0	947.0

(END OF REPORT)