

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: P521632

Luminaire Tested: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521632  
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\_5700K  
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 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10183.3 lumens  
Efficiency: N/A  
Efficacy: 121.7 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

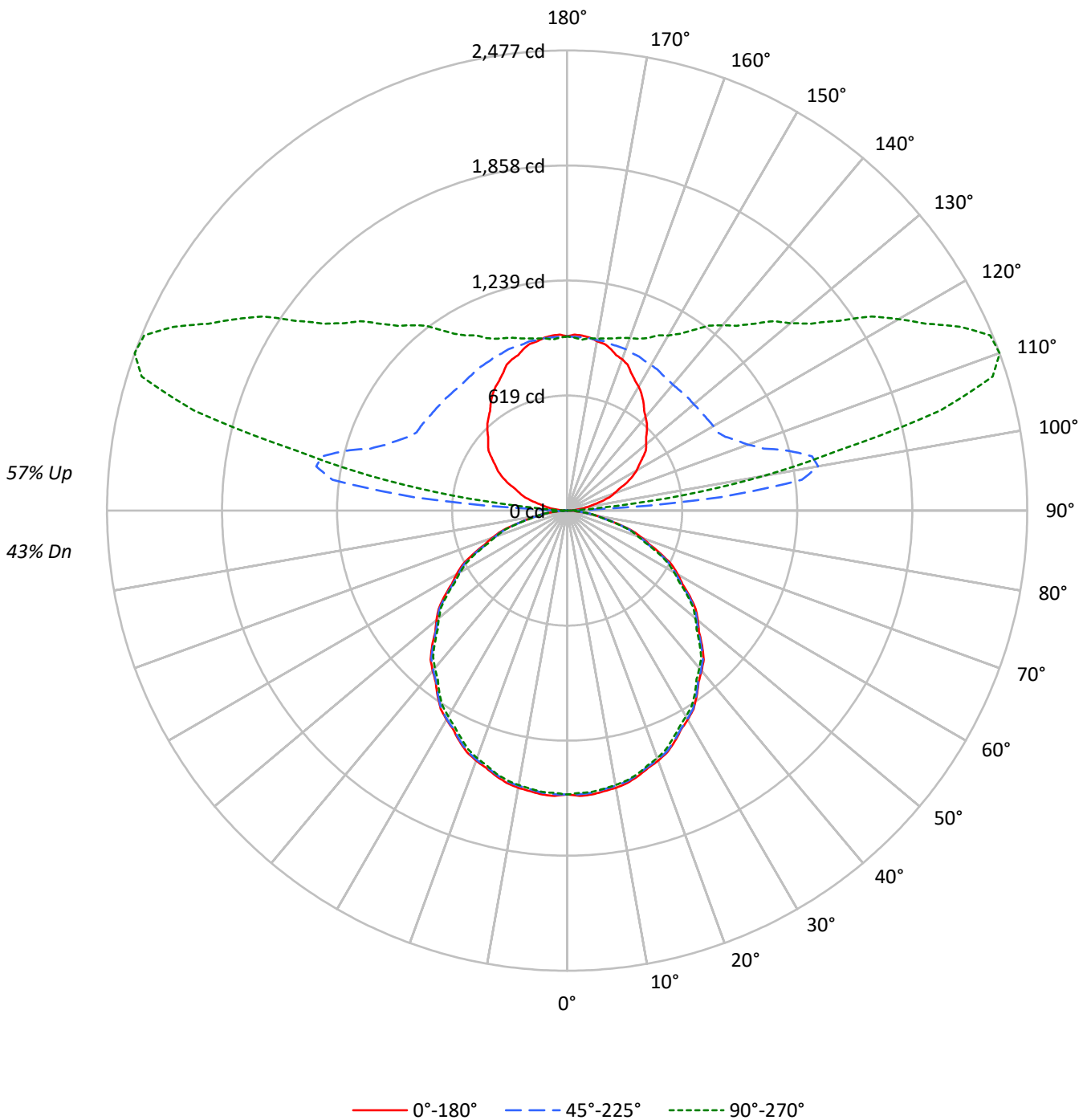
Input Watts (W): 83.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	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	1.4
10°-20°	414.4	4.1
20°-30°	626.6	6.2
30°-40°	754.6	7.4
40°-50°	783.7	7.7
50°-60°	710.4	7.0
60°-70°	541.0	5.3
70°-80°	302.3	3.0
80°-90°	78.4	0.8
90°-100°	427.5	4.2
100°-110°	1216.3	11.9
110°-120°	1165.4	11.4
120°-130°	922.3	9.1
130°-140°	740.3	7.3
140°-150°	579.6	5.7
150°-160°	424.1	4.2
160°-170°	262.7	2.6
170°-180°	89.1	0.9
0°-30°	1185.7	11.6
0°-40°	1940.3	19.1
0°-60°	3434.3	33.7
0°-90°	4356.0	42.8
90°-120°	2809.1	27.6
90°-150°	5051.4	49.6
90°-180°	5827.0	57.2
0°-180°	10183.3	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	4
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°	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°	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)