

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: P521406

Luminaire Tested: SQ4-F-050U-075D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521406  
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-050U-075D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5181.4 lumens  
Efficiency: N/A  
Efficacy: 108.6 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

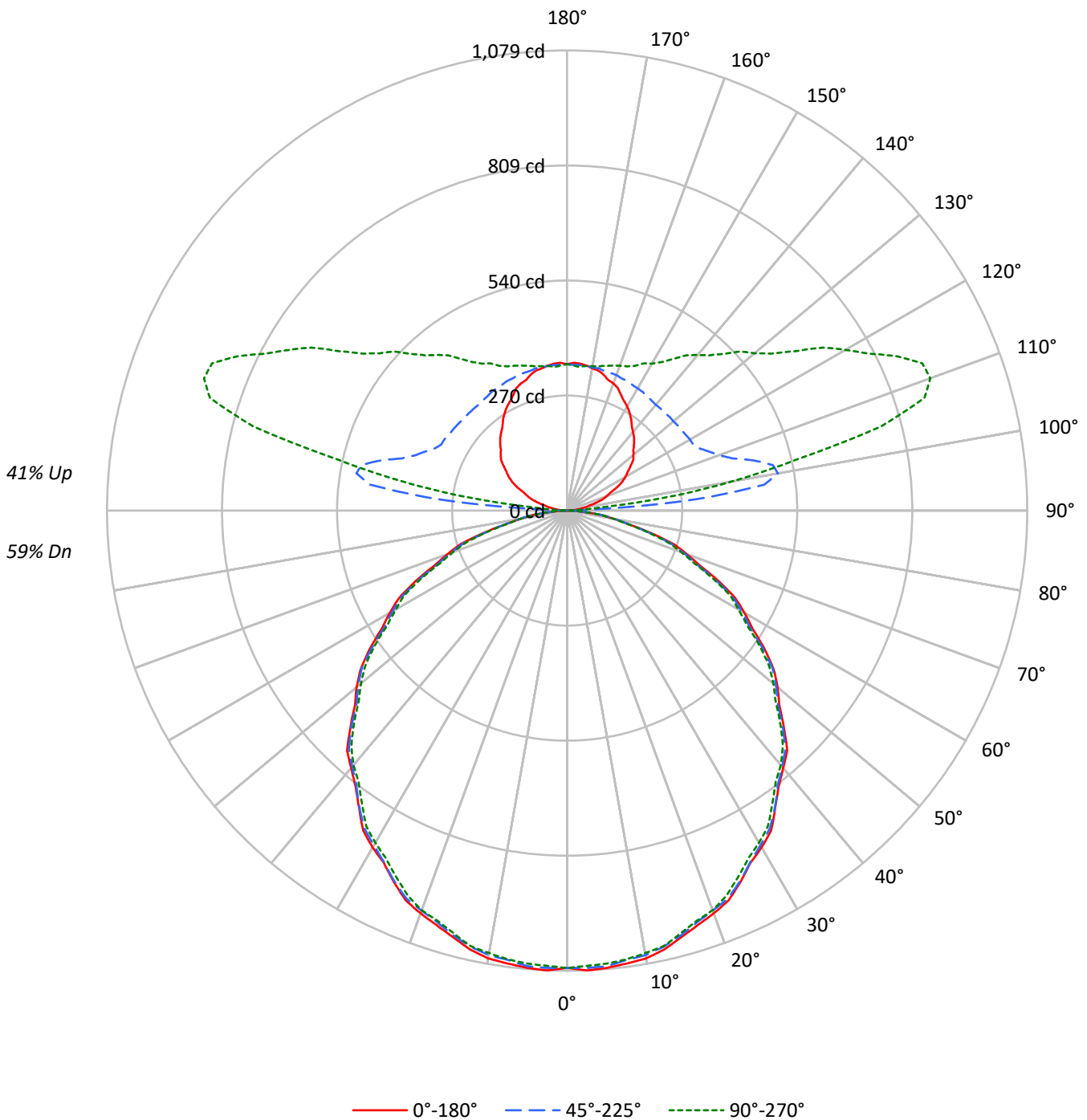
Input Watts (W): 47.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20				20				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	109	109	109	109	102	102	102	102	88	88	88		76	76	76		64	64	64	59
1	100	95	91	88	93	89	85	82	77	75	72		66	65	63		57	55	54	49
2	91	83	77	71	84	78	72	67	67	63	60		58	55	52		50	47	45	41
3	83	73	65	59	77	68	61	56	59	54	50		51	47	44		44	41	38	34
4	75	64	56	50	70	60	53	47	53	47	42		46	41	37		39	36	33	29
5	69	57	49	43	64	54	46	41	47	41	36		41	36	32		35	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32		37	32	28		32	28	25	22
7	59	46	38	32	55	44	36	31	38	32	28		33	29	25		29	25	22	20
8	55	42	34	29	51	40	32	27	35	29	25		31	26	22		26	23	20	17
9	51	38	31	25	47	36	29	24	32	26	22		28	23	20		24	21	18	16
10	48	35	28	23	44	33	26	22	29	24	20		26	21	18		23	19	16	14

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

	0°	45°	90°
0°	9893	9893	9893
5°	9967	9931	9876
10°	9991	9918	9872
15°	9888	9851	9804
20°	9866	9800	9790
25°	9782	9763	9653
30°	9717	9655	9582
35°	9580	9569	9449
40°	9492	9445	9386
45°	9379	9327	9225
50°	9251	9182	9056
55°	9080	8969	8844
60°	8866	8722	8560
65°	8571	8379	8230
70°	8036	7850	7666
75°	7240	7033	6926
80°	5914	5967	5866
85°	4234	4859	4859

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9379 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.6	2.0
10°-20°	290.6	5.6
20°-30°	439.7	8.5
30°-40°	528.8	10.2
40°-50°	549.0	10.6
50°-60°	497.4	9.6
60°-70°	378.4	7.3
70°-80°	210.3	4.1
80°-90°	54.2	1.0
90°-100°	156.4	3.0
100°-110°	444.9	8.6
110°-120°	426.3	8.2
120°-130°	337.4	6.5
130°-140°	270.8	5.2
140°-150°	212.0	4.1
150°-160°	155.1	3.0
160°-170°	96.1	1.9
170°-180°	32.6	0.6
0°-30°	831.8	16.1
0°-40°	1360.6	26.3
0°-60°	2407.0	46.5
0°-90°	3049.8	58.9
90°-120°	1027.6	19.8
90°-150°	1847.8	35.7
90°-180°	2132.0	41.1
0°-180°	5181.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1076	1067	1072	1067	1066	102
15°	1035	1027	1031	1030	1026	293
25°	961	952	959	949	948	443
35°	851	847	850	840	839	533
45°	719	714	715	707	707	555
55°	564	564	558	553	550	504
65°	393	387	384	378	377	386
75°	203	200	197	195	194	215
85°	40	43	46	46	46	49
90°	0	0	0	0	0	2
95°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1079.3	1070.1	1073.1	1070.7	1068.4
5°	1076.2	1066.6	1072.3	1067.4	1066.4
7.5°	1071.1	1059.8	1062.5	1061.5	1061.5
10°	1066.4	1052.1	1058.6	1053.7	1053.7
12.5°	1053.9	1041.9	1046.9	1044.4	1045.9
15°	1035.2	1026.6	1031.3	1030.2	1026.4
17.5°	1019.0	1008.6	1012.1	1010.3	1008.8
20°	1004.9	995.3	998.1	993.3	997.1
22.5°	989.3	979.7	984.8	976.8	976.8
25°	960.9	952.3	959.0	949.2	948.2
27.5°	930.9	925.3	929.7	922.4	919.7
30°	912.1	903.5	906.3	901.3	899.4
32.5°	890.2	881.6	884.4	875.6	876.8
35°	850.6	846.8	849.6	839.8	838.9
37.5°	814.7	807.0	811.5	803.5	802.7
40°	788.1	780.5	784.2	779.3	779.3
42.5°	763.9	755.5	757.6	751.1	748.8
45°	718.8	714.0	714.8	707.0	707.0
47.5°	674.2	670.8	669.3	661.4	662.9
50°	644.5	638.8	639.7	630.9	630.9
52.5°	610.2	610.5	606.8	601.1	596.5
55°	564.5	563.5	557.6	552.7	549.8
57.5°	515.6	511.2	507.0	500.4	499.8
60°	480.5	477.6	472.7	466.7	463.9
62.5°	444.5	441.7	436.7	431.6	431.1
65°	392.6	386.9	383.8	377.9	377.0
67.5°	336.1	331.6	327.7	323.0	322.5
70°	297.9	294.0	291.0	287.0	284.2
72.5°	262.7	256.6	253.5	250.3	248.2
75°	203.1	200.3	197.3	195.3	194.3
77.5°	145.7	145.9	145.9	143.3	142.4
80°	111.3	112.3	112.3	111.3	110.4
82.5°	80.9	82.6	83.4	82.4	82.2
85°	40.0	42.9	45.9	45.9	45.9
87.5°	10.9	14.8	18.0	18.7	18.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.0</i>	138.4	360.8	788.7	901.5
115°	<i>128.5</i>	155.3	343.8	728.3	855.3
117.5°	<i>144.8</i>	170.0	333.8	662.4	796.8
120°	<i>157.9</i>	178.9	332.7	624.7	753.5
122.5°	<i>168.3</i>	189.4	330.1	591.6	711.2
125°	<i>181.4</i>	201.1	328.2	544.6	651.1
127.5°	<i>195.6</i>	214.1	327.1	516.5	604.2
130°	<i>202.9</i>	221.4	325.5	496.9	573.4
132.5°	<i>210.7</i>	228.7	325.5	481.6	552.1
135°	<i>221.8</i>	240.3	324.2	460.0	520.0
137.5°	<i>232.3</i>	250.2	324.1	441.7	493.5
140°	<i>240.1</i>	258.6	323.6	426.5	476.2
142.5°	<i>249.0</i>	264.4	325.2	414.4	459.0
145°	<i>261.6</i>	275.0	326.8	398.1	433.8
147.5°	<i>272.4</i>	285.5	329.7	381.7	412.6
150°	<i>281.8</i>	290.8	330.8	376.3	398.0
152.5°	<i>289.1</i>	298.6	331.8	368.9	389.1
155°	<i>298.8</i>	305.8	334.7	359.8	374.5
157.5°	<i>310.8</i>	315.0	335.3	355.7	366.1
160°	<i>317.1</i>	320.3	337.9	352.5	361.4
162.5°	<i>320.7</i>	324.4	338.5	349.8	356.7
165°	<i>330.1</i>	331.4	338.6	345.9	351.0
167.5°	<i>336.5</i>	335.4	341.6	344.9	346.9
170°	<i>338.6</i>	338.0	340.5	341.3	343.8
172.5°	<i>343.3</i>	341.1	342.1	340.2	342.2
175°	<i>345.8</i>	343.9	342.5	340.5	337.9
177.5°	<i>346.8</i>	343.7	342.1	340.0	340.5
180°	<i>343.2</i>	343.2	343.2	343.2	343.2

(END OF REPORT)