

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: P521460

Luminaire Tested: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521460  
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-075U-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

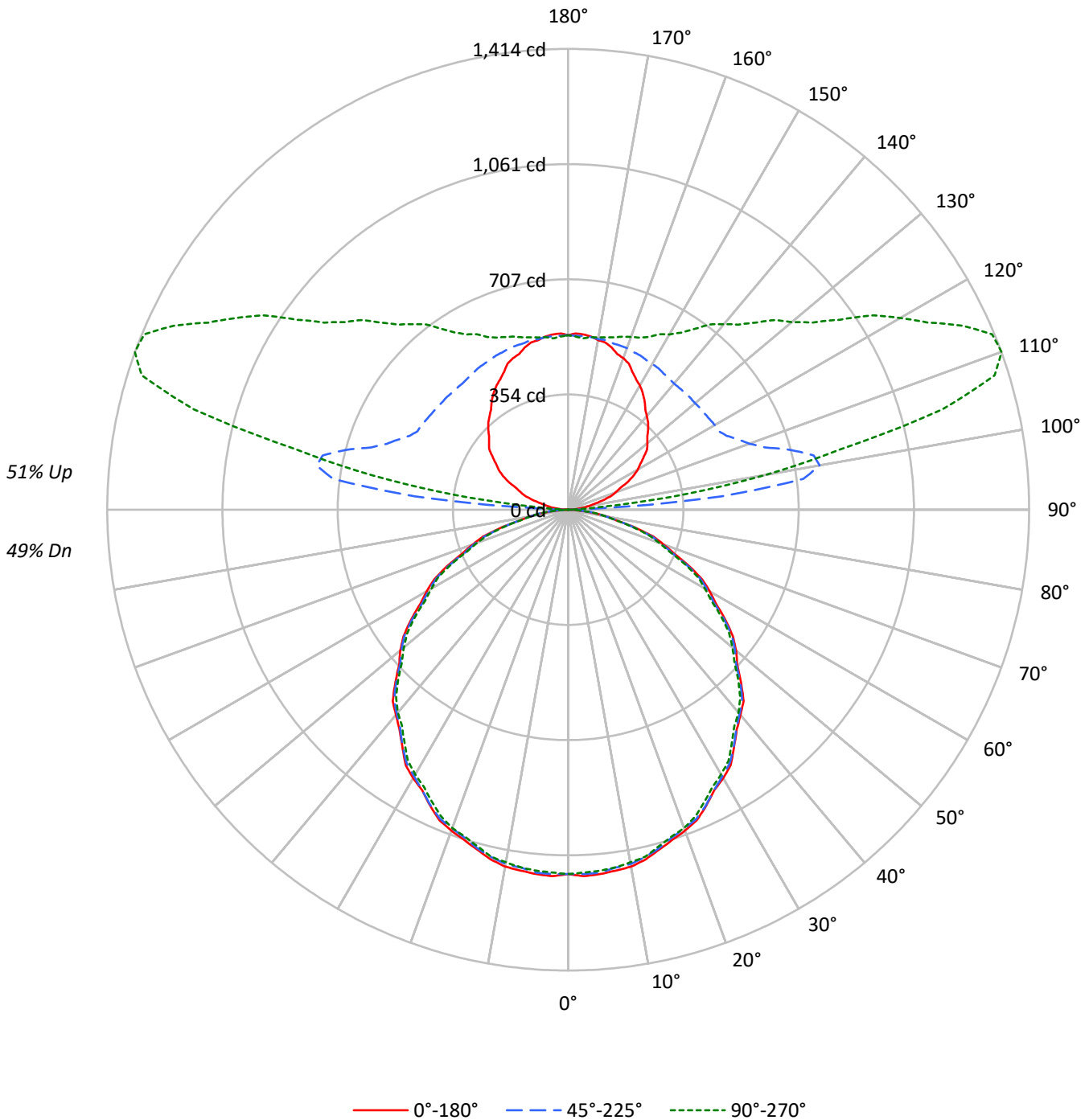
Lumens per Lamp: N/A  
Luminaire Lumens: 6507.2 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 55.6  
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41				
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34				
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29				
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21				
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16				
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14				
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12				

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

	0°	45°	90°
0°	10316	10316	10316
5°	10393	10355	10299
10°	10418	10341	10293
15°	10310	10271	10222
20°	10288	10218	10208
25°	10200	10180	10066
30°	10133	10068	9992
35°	9989	9978	9852
40°	9898	9848	9787
45°	9779	9726	9619
50°	9647	9574	9442
55°	9468	9352	9222
60°	9245	9095	8925
65°	8938	8737	8582
70°	8379	8187	7993
75°	7550	7333	7222
80°	6169	6222	6115
85°	4425	5071	5071

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9779 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	1.6
10°-20°	303.0	4.7
20°-30°	458.4	7.0
30°-40°	551.4	8.5
40°-50°	572.5	8.8
50°-60°	518.6	8.0
60°-70°	394.5	6.1
70°-80°	219.2	3.4
80°-90°	56.5	0.9
90°-100°	244.1	3.8
100°-110°	694.5	10.7
110°-120°	665.4	10.2
120°-130°	526.6	8.1
130°-140°	422.7	6.5
140°-150°	330.9	5.1
150°-160°	242.1	3.7
160°-170°	150.0	2.3
170°-180°	50.9	0.8
0°-30°	867.4	13.3
0°-40°	1418.7	21.8
0°-60°	2509.8	38.6
0°-90°	3180.1	48.9
90°-120°	1603.9	24.6
90°-150°	2884.1	44.3
90°-180°	3327.0	51.1
0°-180°	6507.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1122	1112	1118	1113	1112	107
15°	1079	1070	1075	1074	1070	305
25°	1002	993	1000	990	989	462
35°	887	883	886	876	875	556
45°	750	744	745	737	737	578
55°	589	588	581	576	573	525
65°	409	403	400	394	393	403
75°	212	209	206	204	203	224
85°	42	45	48	48	48	52
90°	0	0	0	0	0	3
95°	26	105	472	164	101	30
105°	108	164	708	1250	1188	114
115°	201	242	537	1137	1335	198
125°	283	314	512	850	1016	253
135°	346	375	506	718	812	267
145°	408	429	510	621	677	255
155°	466	477	522	562	584	216
165°	515	517	528	540	548	145
175°	540	537	535	532	528	51
180°	536	536	536	536	536	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1118.1	1118.1	1118.1	1118.1	1118.1
2.5°	1125.4	1115.9	1118.9	1116.4	1114.0
5°	1122.2	1112.2	1118.1	1113.0	1112.0
7.5°	1116.9	1105.1	1107.9	1106.9	1106.9
10°	1112.0	1097.0	1103.8	1098.7	1098.7
12.5°	1098.9	1086.4	1091.6	1089.0	1090.6
15°	1079.4	1070.4	1075.3	1074.2	1070.2
17.5°	1062.5	1051.7	1055.4	1053.5	1051.9
20°	1047.8	1037.9	1040.7	1035.7	1039.7
22.5°	1031.5	1021.6	1026.8	1018.5	1018.5
25°	1002.0	993.0	1000.0	989.8	988.8
27.5°	970.6	964.9	969.4	961.8	959.0
30°	951.1	942.1	945.0	939.8	937.9
32.5°	928.3	919.3	922.2	913.0	914.2
35°	886.9	883.0	885.9	875.7	874.7
37.5°	849.5	841.5	846.2	837.8	837.0
40°	821.8	813.8	817.7	812.6	812.6
42.5°	796.5	787.7	790.0	783.2	780.8
45°	749.5	744.5	745.4	737.2	737.2
47.5°	703.0	699.4	697.9	689.6	691.2
50°	672.1	666.1	667.0	657.8	657.8
52.5°	636.2	636.6	632.8	626.8	622.0
55°	588.6	587.6	581.4	576.3	573.3
57.5°	537.7	533.1	528.7	521.8	521.2
60°	501.0	498.0	492.9	486.7	483.7
62.5°	463.5	460.5	455.4	450.1	449.5
65°	409.4	403.4	400.2	394.1	393.1
67.5°	350.5	345.7	341.7	336.8	336.2
70°	310.6	306.6	303.5	299.3	296.3
72.5°	273.9	267.5	264.3	261.0	258.9
75°	211.8	208.8	205.7	203.6	202.6
77.5°	151.9	152.1	152.1	149.5	148.5
80°	116.1	117.1	117.1	116.1	115.1
82.5°	84.3	86.1	87.0	85.9	85.7
85°	41.8	44.7	47.9	47.9	47.9
87.5°	11.4	15.4	18.7	19.5	18.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	43.2	100.2	29.2	22.0
95°	26.5	105.1	472.5	163.5	100.8
97.5°	48.7	123.2	727.7	520.7	356.8
100°	64.2	133.8	783.1	793.2	611.0
102.5°	81.3	145.4	770.8	1015.3	856.2
105°	107.9	163.7	707.7	1250.1	1188.4
107.5°	135.0	185.0	634.0	1316.3	1371.2
110°	153.8	200.6	591.6	1290.9	1414.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	171.7	216.1	563.1	1231.0	1407.1
115°	200.6	242.4	536.6	1136.8	1335.0
117.5°	226.1	265.3	521.0	1033.9	1243.7
120°	246.4	279.3	519.3	975.0	1176.1
122.5°	262.7	295.6	515.3	923.4	1110.1
125°	283.1	314.0	512.2	850.0	1016.3
127.5°	305.3	334.2	510.6	806.1	943.1
130°	316.7	345.6	508.1	775.6	895.1
132.5°	328.9	357.0	508.1	751.8	861.7
135°	346.2	375.1	506.1	718.0	811.6
137.5°	362.5	390.6	505.9	689.4	770.2
140°	374.7	403.6	505.1	665.7	743.4
142.5°	388.6	412.7	507.5	646.8	716.5
145°	408.3	429.2	510.2	621.4	677.2
147.5°	425.2	445.6	514.6	595.8	644.0
150°	439.9	453.8	516.3	587.3	621.2
152.5°	451.3	466.0	517.9	575.8	607.3
155°	466.4	477.3	522.4	561.6	584.5
157.5°	485.1	491.7	523.4	555.1	571.5
160°	494.9	499.9	527.5	550.2	564.1
162.5°	500.6	506.4	528.3	546.1	556.8
165°	515.3	517.2	528.5	539.9	547.8
167.5°	525.2	523.4	533.2	538.3	541.5
170°	528.5	527.5	531.5	532.7	536.6
172.5°	535.8	532.4	534.0	531.0	534.2
175°	539.7	536.7	534.6	531.5	527.5
177.5°	541.3	536.5	534.0	530.8	531.5
180°	535.6	535.6	535.6	535.6	535.6

(END OF REPORT)