

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: P521356

Luminaire Tested: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521356  
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-025U-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 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: 5152.2 lumens  
Efficiency: N/A  
Efficacy: 112.2 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

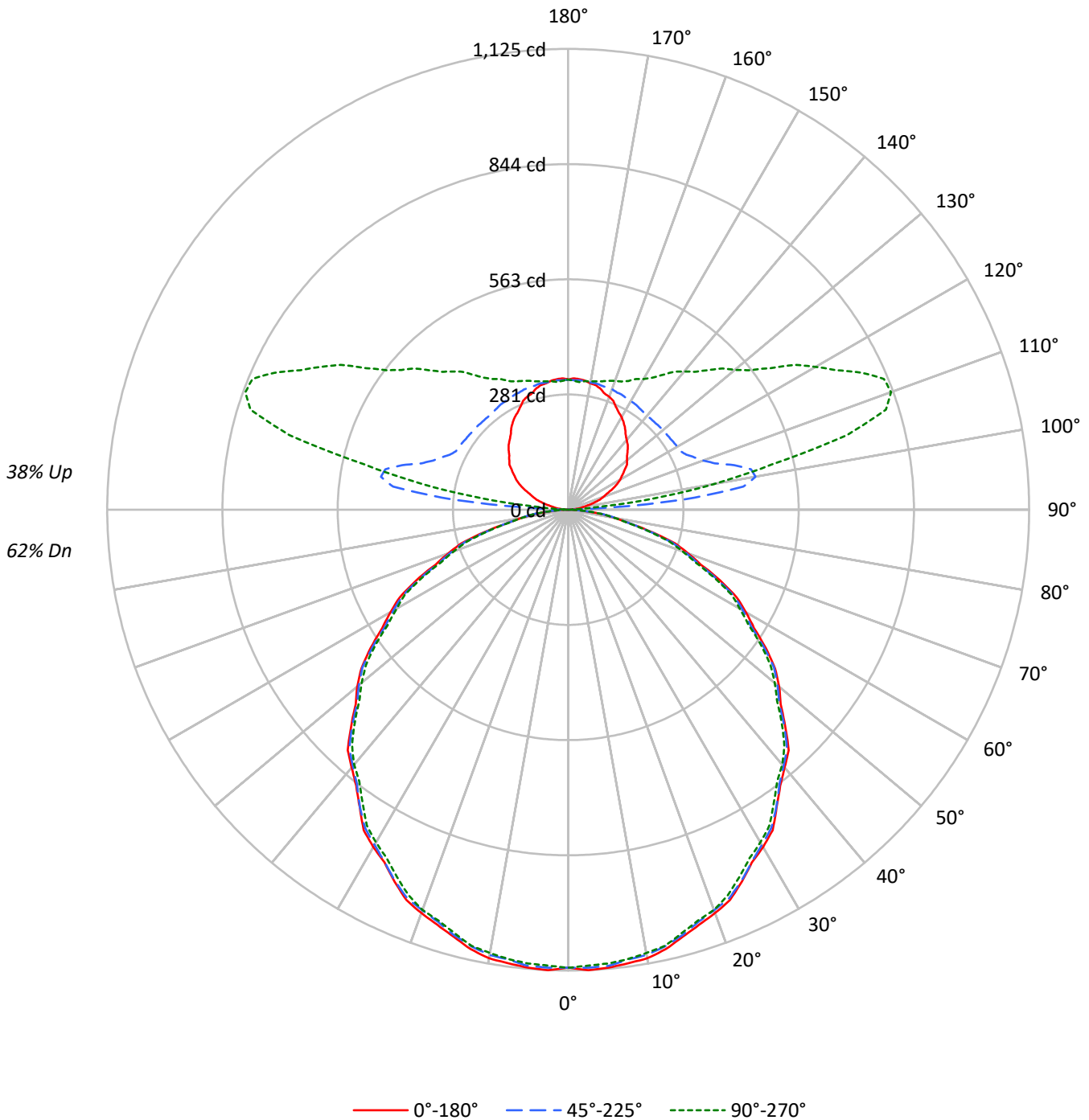
Input Watts (W): 45.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	100	96	92	88	94	90	86	83	79	76	74	68	66	65	59	58	56	52
2	91	83	77	72	85	78	73	68	69	64	61	60	57	54	52	49	47	43
3	83	73	66	60	77	69	62	57	60	55	51	53	49	45	46	42	40	36
4	76	65	56	50	71	61	53	48	54	48	43	47	42	39	41	37	34	31
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	33	30	27
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	33	29	26	23
7	59	47	38	33	55	44	37	31	39	33	28	34	29	26	30	26	23	21
8	55	42	34	29	51	40	33	28	36	30	25	31	27	23	28	24	21	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19	16
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

**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	2.1
10°-20°	303.0	5.9
20°-30°	458.4	8.9
30°-40°	551.4	10.7
40°-50°	572.5	11.1
50°-60°	518.6	10.1
60°-70°	394.5	7.7
70°-80°	219.2	4.3
80°-90°	56.5	1.1
90°-100°	144.7	2.8
100°-110°	411.6	8.0
110°-120°	394.4	7.7
120°-130°	312.1	6.1
130°-140°	250.5	4.9
140°-150°	196.1	3.8
150°-160°	143.5	2.8
160°-170°	88.9	1.7
170°-180°	30.2	0.6
0°-30°	867.4	16.8
0°-40°	1418.7	27.5
0°-60°	2509.8	48.7
0°-90°	3180.1	61.7
90°-120°	950.7	18.5
90°-150°	1709.6	33.2
90°-180°	1972.0	38.3
0°-180°	5152.2	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	2
95°	16	62	280	97	60	18
105°	64	97	420	741	704	68
115°	119	144	318	674	791	117
125°	168	186	304	504	602	150
135°	205	222	300	426	481	158
145°	242	254	302	368	401	151
155°	276	283	310	333	346	128
165°	305	307	313	320	325	86
175°	320	318	317	315	313	30
180°	318	318	318	318	318	

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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°	4.8	25.6	59.4	17.3	13.0
95°	15.7	62.3	280.1	96.9	59.8
97.5°	28.9	73.0	431.3	308.6	211.5
100°	38.0	79.3	464.2	470.2	362.2
102.5°	48.2	86.2	456.9	601.8	507.5
105°	64.0	97.0	419.5	741.0	704.4
107.5°	80.0	109.7	375.8	780.2	812.8
110°	91.1	118.9	350.7	765.2	838.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	101.8	128.1	333.8	729.7	834.1
115°	118.9	143.7	318.1	673.9	791.3
117.5°	134.0	157.3	308.8	612.8	737.2
120°	146.1	165.5	307.8	577.9	697.2
122.5°	155.7	175.2	305.4	547.3	658.0
125°	167.8	186.1	303.6	503.8	602.4
127.5°	181.0	198.1	302.6	477.8	559.1
130°	187.7	204.8	301.2	459.7	530.6
132.5°	195.0	211.6	301.2	445.6	510.8
135°	205.2	222.3	300.0	425.6	481.1
137.5°	214.9	231.5	299.9	408.6	456.6
140°	222.1	239.2	299.4	394.6	440.6
142.5°	230.3	244.6	300.8	383.4	424.7
145°	242.0	254.4	302.4	368.3	401.4
147.5°	252.1	264.1	305.1	353.2	381.7
150°	260.8	269.0	306.0	348.1	368.2
152.5°	267.5	276.2	307.0	341.3	360.0
155°	276.4	282.9	309.6	332.9	346.5
157.5°	287.6	291.4	310.2	329.1	338.7
160°	293.3	296.3	312.7	326.1	334.4
162.5°	296.7	300.2	313.1	323.7	330.0
165°	305.4	306.6	313.3	320.0	324.7
167.5°	311.3	310.3	316.0	319.1	321.0
170°	313.3	312.7	315.1	315.7	318.1
172.5°	317.6	315.6	316.5	314.8	316.6
175°	319.9	318.1	316.9	315.0	312.7
177.5°	320.9	318.0	316.5	314.6	315.1
180°	317.5	317.5	317.5	317.5	317.5

(END OF REPORT)