

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: P521564

Luminaire Tested: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521564  
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-100U-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 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: 7632.6 lumens  
Efficiency: N/A  
Efficacy: 118.7 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

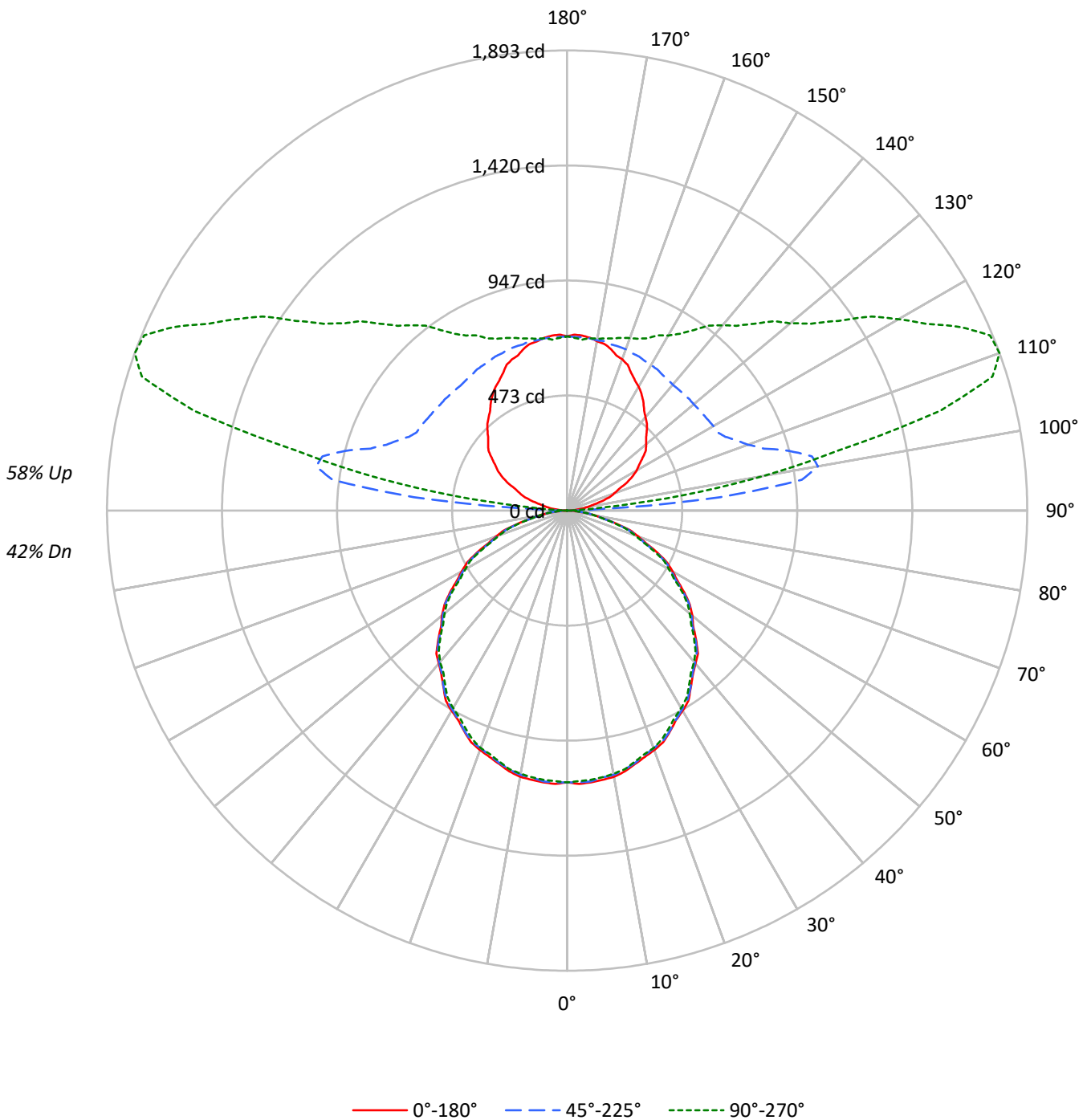
Input Watts (W): 64.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20				20				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	105	105	105	105	96	96	96	96	79	79	79		63	63	63		48	48	48	42
1	96	91	88	84	87	84	80	77	69	66	64		55	54	52		43	42	41	35
2	87	80	74	68	79	73	68	63	60	56	53		48	46	43		37	36	34	29
3	79	70	63	57	72	64	58	53	53	48	44		43	39	36		33	31	29	24
4	72	62	54	48	66	57	50	44	47	42	38		38	34	31		29	27	25	21
5	66	55	47	41	60	50	43	38	42	36	32		34	30	27		26	24	21	18
6	61	49	41	35	55	45	38	33	38	32	28		30	26	23		24	21	19	16
7	56	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		25	21	18		20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19		23	19	16		18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17		21	17	15		17	14	12	10

**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	1.4
10°-20°	303.0	4.0
20°-30°	458.4	6.0
30°-40°	551.4	7.2
40°-50°	572.5	7.5
50°-60°	518.6	6.8
60°-70°	394.5	5.2
70°-80°	219.2	2.9
80°-90°	56.5	0.7
90°-100°	326.6	4.3
100°-110°	929.4	12.2
110°-120°	890.4	11.7
120°-130°	704.7	9.2
130°-140°	565.7	7.4
140°-150°	442.8	5.8
150°-160°	324.0	4.2
160°-170°	200.7	2.6
170°-180°	68.1	0.9
0°-30°	867.4	11.4
0°-40°	1418.7	18.6
0°-60°	2509.8	32.9
0°-90°	3180.1	41.7
90°-120°	2146.4	28.1
90°-150°	3859.7	50.6
90°-180°	4453.0	58.3
0°-180°	7632.6	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°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

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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°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)