

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:

Luminaire Tested: SQ4-PR1-100U-100D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

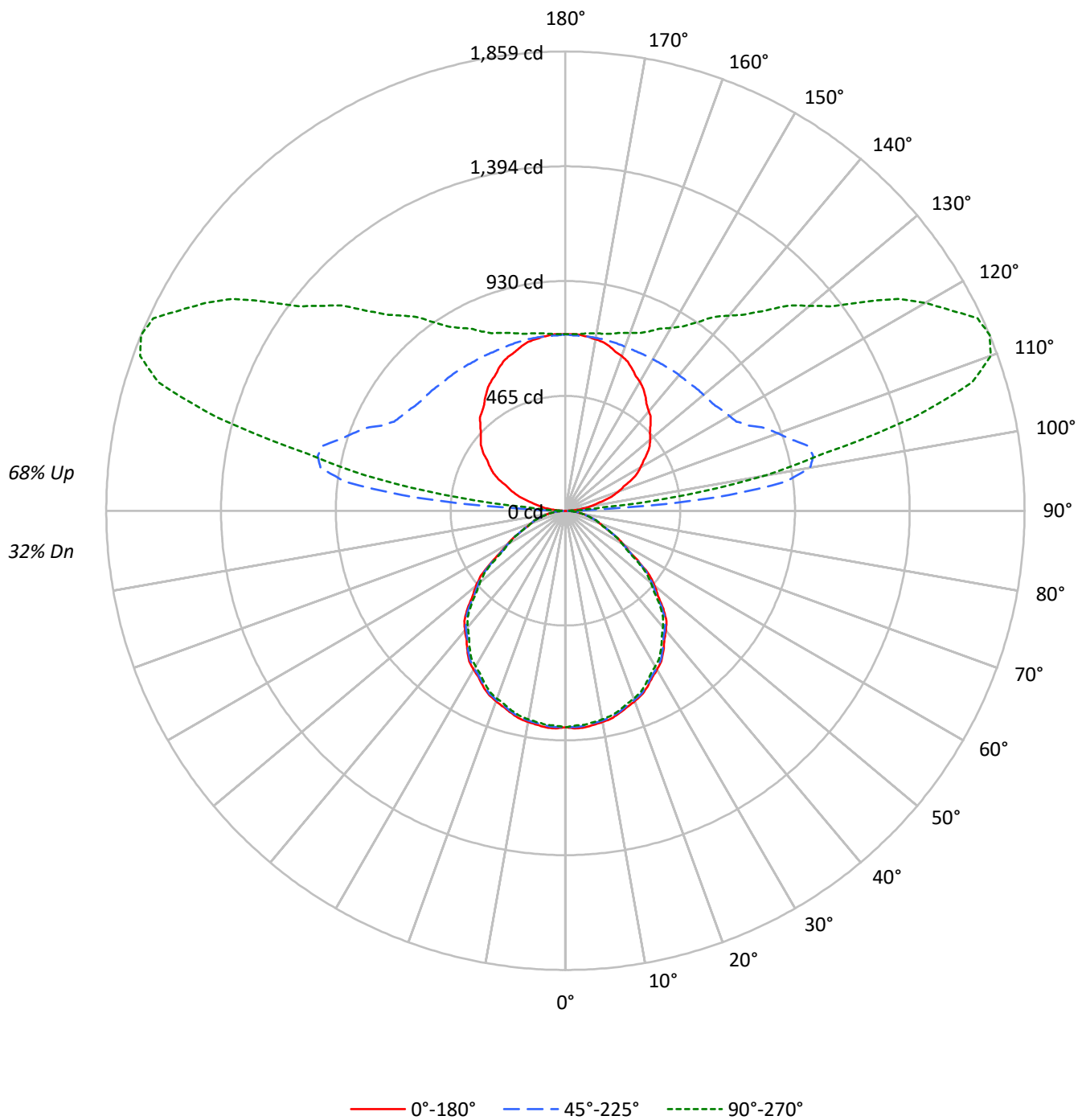
Lumens per Lamp: N/A
Luminaire Lumens: 6831.8 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 92.9
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29
3	78	69	62	57	70	63	57	52	50	46	42	39	36	33	28	26	25
4	72	61	54	48	64	55	49	44	45	40	36	34	31	29	25	23	21
5	66	54	47	41	59	49	43	38	40	35	31	31	28	25	23	20	19
6	60	49	41	35	54	44	38	33	36	31	27	28	24	22	20	18	16
7	56	44	36	31	50	40	33	29	32	27	24	25	22	19	19	16	15
8	52	40	32	27	46	36	30	25	29	25	21	23	20	17	17	15	13
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5392	5392	5392
5°	5441	5399	5370
10°	5423	5386	5358
15°	5399	5366	5337
20°	5373	5338	5298
25°	5334	5298	5237
30°	5277	5239	5164
35°	5199	5154	5080
40°	5081	5026	4935
45°	4874	4788	4689
50°	4509	4400	4314
55°	3936	3847	3765
60°	3317	3288	3223
65°	2869	2879	2857
70°	2635	2647	2647
75°	2531	2531	2548
80°	2380	2409	2380
85°	1920	2131	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4874 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.2
10°-20°	237.2	3.5
20°-30°	357.7	5.2
30°-40°	426.3	6.2
40°-50°	420.3	6.2
50°-60°	321.2	4.7
60°-70°	198.8	2.9
70°-80°	112.9	1.7
80°-90°	35.8	0.5
90°-100°	334.3	4.9
100°-110°	923.0	13.5
110°-120°	951.9	13.9
120°-130°	765.0	11.2
130°-140°	601.2	8.8
140°-150°	461.1	6.7
150°-160°	331.4	4.9
160°-170°	202.6	3.0
170°-180°	68.3	1.0
0°-30°	677.8	9.9
0°-40°	1104.1	16.2
0°-60°	1845.5	27.0
0°-90°	2193.0	32.1
90°-120°	2209.3	32.3
90°-150°	4036.5	59.1
90°-180°	4639.0	67.9
0°-180°	6831.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	881	872	874	871	870	84
15°	848	839	843	840	838	239
25°	786	776	781	772	772	362
35°	692	684	686	677	676	432
45°	560	553	550	541	539	429
55°	367	361	359	353	351	329
65°	197	196	198	196	196	200
75°	106	106	106	107	107	112
85°	27	29	30	30	30	32
90°	2	4	9	10	11	5
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.6	876.6	876.6	876.6	876.6
2.5°	882.1	874.4	876.6	874.7	870.6
5°	881.2	871.6	874.4	871.3	869.8
7.5°	874.4	864.9	867.7	864.7	863.8
10°	868.3	859.5	862.3	859.2	857.8
12.5°	861.7	852.2	855.7	852.0	850.5
15°	847.9	839.1	842.7	839.6	838.1
17.5°	832.8	823.4	827.0	823.4	821.5
20°	820.8	811.9	815.5	810.2	809.4
22.5°	807.5	798.6	802.2	795.1	794.9
25°	786.0	776.4	780.7	772.4	771.7
27.5°	760.5	751.7	755.2	746.7	745.9
30°	743.0	734.1	737.7	728.6	727.1
32.5°	723.1	714.8	717.8	708.7	707.8
35°	692.4	684.3	686.4	677.3	676.5
37.5°	657.5	650.1	651.3	641.3	640.6
40°	632.8	625.4	626.0	615.4	614.6
42.5°	605.6	598.2	597.6	587.0	586.2
45°	560.3	552.9	550.4	540.6	539.1
47.5°	508.6	501.2	496.7	488.7	487.6
50°	471.2	463.8	459.8	453.0	450.8
52.5°	430.7	423.3	420.0	413.7	411.5
55°	367.0	361.1	358.7	352.6	351.1
57.5°	306.4	302.4	301.7	295.8	295.2
60°	269.6	267.3	267.3	262.0	262.0
62.5°	238.2	236.5	237.7	234.2	233.6
65°	197.1	195.6	197.8	196.3	196.3
67.5°	164.6	164.6	166.0	165.4	165.4
70°	146.5	146.5	147.2	147.2	147.2
72.5°	130.2	129.6	131.5	131.5	130.9
75°	106.5	106.5	106.5	107.2	107.2
77.5°	82.9	83.1	83.7	83.5	82.9
80°	67.2	67.9	68.0	67.2	67.2
82.5°	51.5	52.2	52.3	52.1	51.5
85°	27.2	28.7	30.2	30.2	30.2
87.5°	8.3	11.1	13.9	14.1	13.8
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)