

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-PR1-075U-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-075U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

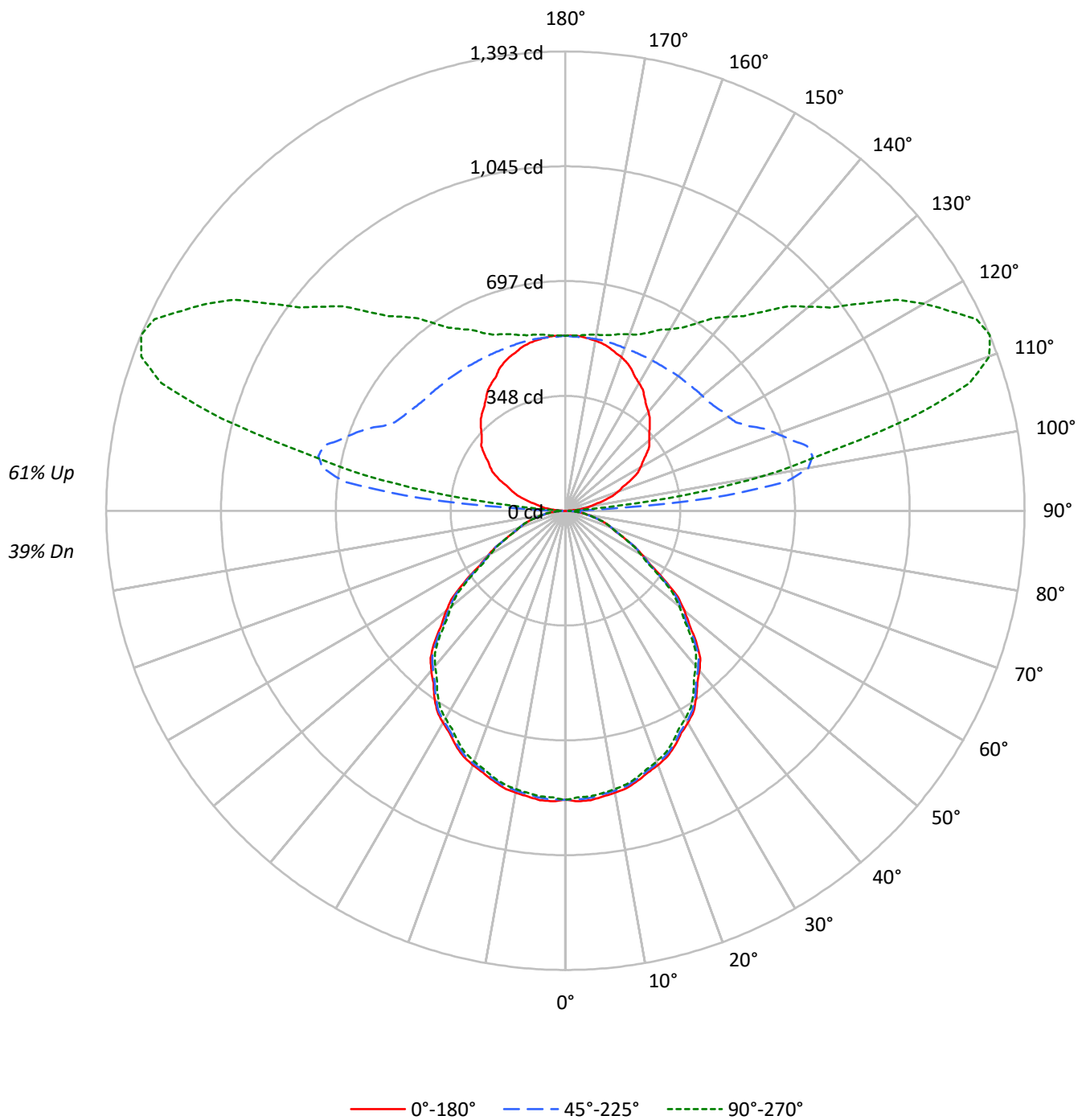
Lumens per Lamp: N/A
Luminaire Lumens: 5650.6 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 82.9
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33
3	80	70	63	58	72	64	58	53	53	48	45	42	39	37	32	30	29
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12

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	1.5
10°-20°	237.2	4.2
20°-30°	357.7	6.3
30°-40°	426.3	7.5
40°-50°	420.3	7.4
50°-60°	321.2	5.7
60°-70°	198.8	3.5
70°-80°	112.9	2.0
80°-90°	35.7	0.6
90°-100°	250.3	4.4
100°-110°	688.7	12.2
110°-120°	710.9	12.6
120°-130°	569.6	10.1
130°-140°	447.4	7.9
140°-150°	342.8	6.1
150°-160°	246.5	4.4
160°-170°	150.7	2.7
170°-180°	50.8	0.9
0°-30°	677.8	12.0
0°-40°	1104.1	19.5
0°-60°	1845.5	32.7
0°-90°	2192.9	38.8
90°-120°	1650.0	29.2
90°-150°	3009.8	53.3
90°-180°	3458.0	61.2
0°-180°	5650.6	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°	1	4	8	10	10	4
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

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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°	8.1	11.1	13.7	14.1	13.5
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)