

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-PR1-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

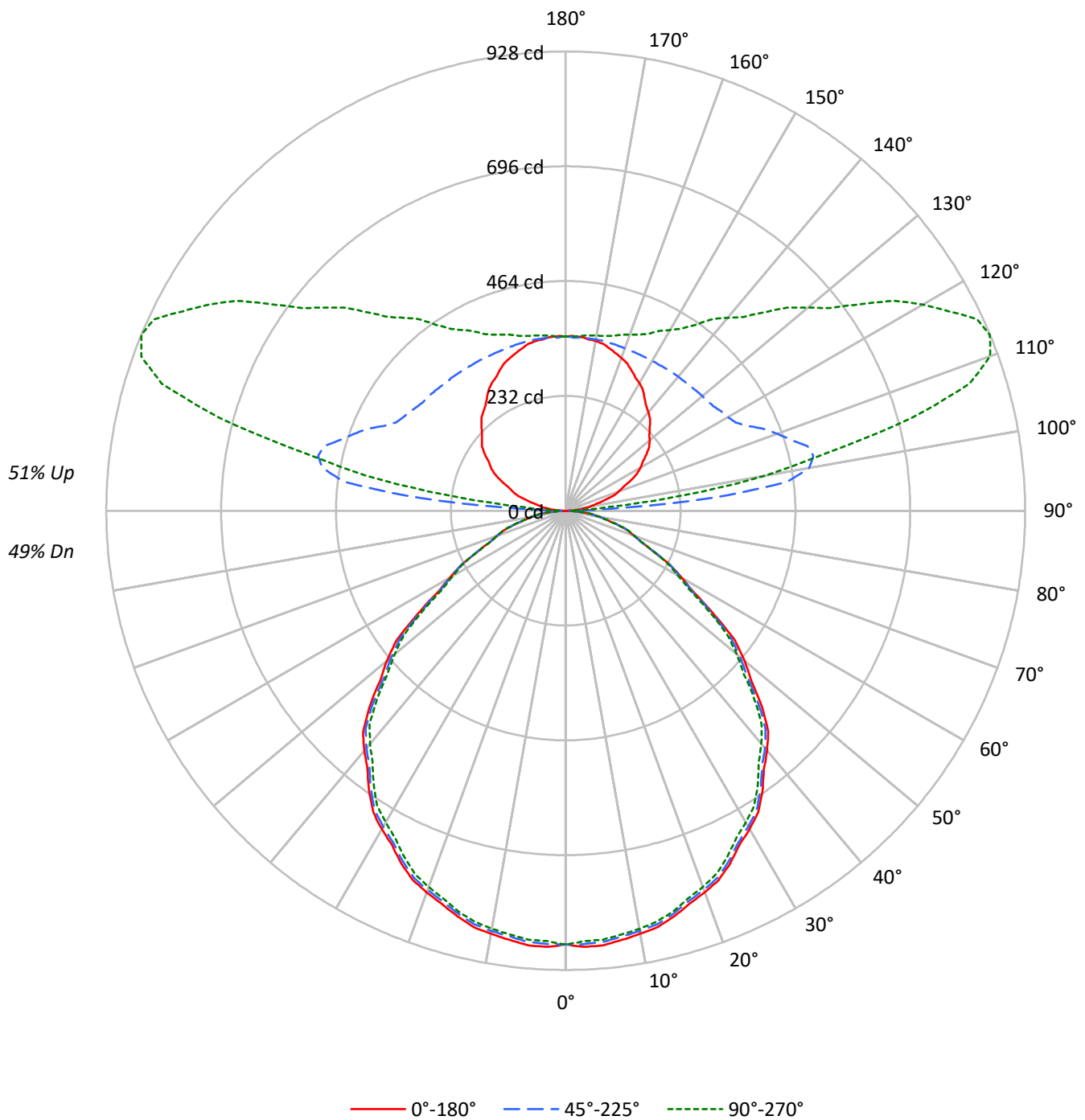
Lumens per Lamp: N/A
Luminaire Lumens: 4493.5 lumens
Efficiency: N/A
Efficacy: 61.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	71	68	60	59	57	49	48	47
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26
6	63	51	43	38	58	48	41	36	41	35	31	35	30	27	29	25	23
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	21
8	54	42	35	29	50	39	32	28	34	28	25	29	25	21	24	21	18
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	21	17	15

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	1.8
10°-20°	237.2	5.3
20°-30°	357.7	8.0
30°-40°	426.3	9.5
40°-50°	420.3	9.4
50°-60°	321.2	7.1
60°-70°	198.8	4.4
70°-80°	112.9	2.5
80°-90°	35.7	0.8
90°-100°	169.1	3.8
100°-110°	459.5	10.2
110°-120°	472.4	10.5
120°-130°	377.7	8.4
130°-140°	296.8	6.6
140°-150°	227.6	5.1
150°-160°	163.7	3.6
160°-170°	100.1	2.2
170°-180°	33.7	0.8
0°-30°	677.8	15.1
0°-40°	1104.1	24.6
0°-60°	1845.5	41.1
0°-90°	2192.9	48.8
90°-120°	1101.1	24.5
90°-150°	2003.2	44.6
90°-180°	2301.0	51.2
0°-180°	4493.5	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	3
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

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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	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)