

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-WB-025U-050D-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

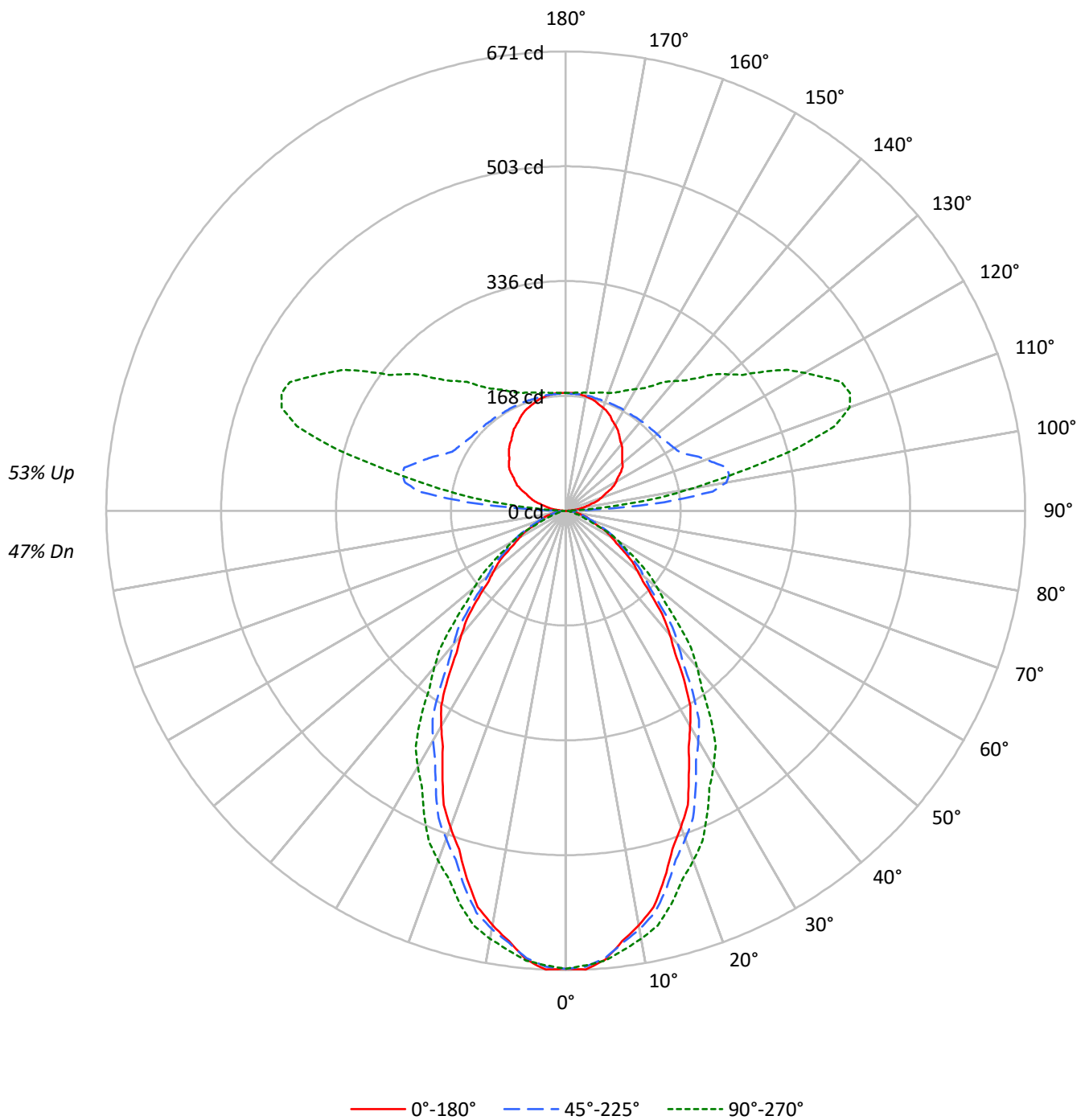
Lumens per Lamp: N/A
Luminaire Lumens: 2091.9 lumens
Efficiency: N/A
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.9
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	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53
1	98	94	91	88	90	87	84	81	73	71	69	60	59	58	48	48	47
2	90	84	78	73	83	77	72	68	65	62	59	54	52	50	44	43	41
3	83	74	68	62	76	69	63	59	59	54	51	49	46	43	40	38	36
4	77	67	59	54	70	62	56	51	53	48	44	44	41	38	37	34	32
5	71	60	52	47	65	56	49	44	48	43	39	40	37	34	34	31	29
6	66	54	47	41	60	51	44	39	44	39	35	37	33	30	31	28	26
7	61	49	42	37	56	46	40	35	40	35	31	34	30	27	29	26	24
8	57	45	38	33	52	42	36	31	37	32	28	31	28	25	27	24	22
9	53	42	34	30	49	39	33	28	34	29	25	29	25	23	25	22	20
10	50	38	31	27	46	36	30	26	31	27	23	27	23	21	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4117	4117	4117
5°	4066	4052	4075
10°	3842	3876	3966
15°	3546	3628	3791
20°	3220	3342	3563
25°	2888	3046	3319
30°	2582	2751	3067
35°	2259	2422	2768
40°	1901	2051	2396
45°	1568	1704	2001
50°	1310	1428	1667
55°	1112	1226	1377
60°	950	1063	1099
65°	757	894	710
70°	671	698	433
75°	620	566	266
80°	574	521	230
85°	515	480	183

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2001 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	2.9
10°-20°	159.7	7.6
20°-30°	206.9	9.9
30°-40°	202.6	9.7
40°-50°	155.1	7.4
50°-60°	103.3	4.9
60°-70°	56.4	2.7
70°-80°	23.5	1.1
80°-90°	7.6	0.4
90°-100°	83.9	4.0
100°-110°	220.5	10.5
110°-120°	228.7	10.9
120°-130°	183.4	8.8
130°-140°	143.9	6.9
140°-150°	110.5	5.3
150°-160°	79.6	3.8
160°-170°	48.7	2.3
170°-180°	16.4	0.8
0°-30°	428.0	20.5
0°-40°	630.5	30.1
0°-60°	888.9	42.5
0°-90°	976.3	46.7
90°-120°	533.1	25.5
90°-150°	970.9	46.4
90°-180°	1116.0	53.3
0°-180°	2091.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	658	652	656	658	660	61
15°	557	555	570	585	595	156
25°	426	427	449	468	489	196
35°	301	302	322	344	369	187
45°	180	184	196	211	230	141
55°	104	108	114	119	128	94
65°	52	56	61	54	49	54
75°	26	26	24	16	11	28
85°	7	7	7	4	3	8
90°	1	3	9	4	4	1
95°	11	43	144	74	51	12
105°	40	60	244	370	345	42
115°	71	86	195	390	445	70
125°	98	110	178	300	354	87
135°	117	129	172	242	275	91
145°	136	144	170	207	223	85
155°	153	158	170	187	192	70
165°	166	168	170	177	179	47
175°	172	172	171	173	173	16
180°	172	172	172	172	172	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.4	669.4	669.4	669.4	669.4
2.5°	671.0	665.1	666.6	666.5	664.7
5°	658.5	651.9	656.2	657.7	660.0
7.5°	634.1	629.1	636.8	642.6	647.2
10°	615.1	610.7	620.6	629.0	635.0
12.5°	593.0	589.3	601.6	612.8	620.7
15°	556.9	554.9	569.8	585.3	595.4
17.5°	518.3	517.3	534.5	552.5	565.4
20°	492.0	491.7	510.5	529.3	544.3
22.5°	465.4	466.1	485.8	505.4	522.4
25°	425.6	426.8	448.8	468.4	489.0
27.5°	388.8	389.3	412.1	432.7	454.8
30°	363.6	365.1	387.4	408.8	431.8
32.5°	338.5	340.2	362.0	384.1	407.6
35°	300.8	302.2	322.5	344.2	368.6
37.5°	261.9	263.8	281.9	302.4	326.4
40°	236.7	239.6	255.5	274.9	298.4
42.5°	212.5	216.1	230.9	249.2	270.5
45°	180.3	183.8	195.9	210.7	230.0
47.5°	152.6	156.6	165.9	178.7	195.1
50°	136.9	140.6	149.2	158.7	174.2
52.5°	123.0	126.7	134.4	141.7	154.9
55°	103.7	108.0	114.3	118.6	128.4
57.5°	87.8	92.0	96.9	98.9	104.8
60°	77.2	81.8	86.4	86.1	89.3
62.5°	67.6	71.5	76.0	72.9	73.1
65°	52.0	56.3	61.4	53.6	48.8
67.5°	42.0	42.9	48.2	37.4	31.6
70°	37.3	37.3	38.8	29.0	24.1
72.5°	32.8	32.8	31.5	23.6	18.4
75°	26.1	26.1	23.8	16.3	11.2
77.5°	20.1	19.9	18.2	12.2	8.1
80°	16.2	16.2	14.7	9.6	6.5
82.5°	12.6	12.6	11.4	7.5	4.8
85°	7.3	7.3	6.8	4.4	2.6
87.5°	2.8	3.2	4.1	2.3	2.1
90°	1.1	3.3	8.8	4.4	4.4
92.5°	4.6	22.3	49.4	21.9	14.1
95°	11.0	43.4	144.5	74.5	50.8
97.5°	19.2	47.7	216.3	172.0	126.7
100°	25.4	51.3	238.3	241.5	187.6
102.5°	30.7	54.8	244.5	300.8	254.7
105°	39.7	60.2	243.8	370.2	345.3
107.5°	49.0	68.0	229.9	406.2	412.2
110°	55.2	72.4	218.5	415.4	441.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	61.3	77.7	207.9	409.6	449.3
115°	70.6	85.7	195.3	389.6	444.7
117.5°	79.7	93.5	186.7	362.0	423.0
120°	85.0	97.9	183.2	343.4	402.7
122.5°	90.3	103.2	180.5	324.8	383.3
125°	98.2	110.1	177.6	300.2	354.2
127.5°	104.6	116.7	175.2	280.4	325.9
130°	108.1	121.1	174.3	268.0	310.0
132.5°	111.7	124.6	173.4	257.3	295.0
135°	117.0	128.8	172.1	242.4	274.7
137.5°	122.5	134.1	171.9	231.2	257.7
140°	126.9	137.7	171.0	222.3	247.2
142.5°	130.4	140.3	171.0	216.1	237.4
145°	135.7	144.3	169.9	206.7	222.9
147.5°	141.0	149.4	169.9	198.9	212.3
150°	144.5	152.1	169.9	194.4	205.2
152.5°	148.1	153.9	169.9	190.8	199.0
155°	153.4	157.7	169.9	186.6	192.0
157.5°	157.3	161.4	169.9	182.8	186.7
160°	160.0	163.2	169.9	181.0	183.2
162.5°	162.6	165.0	169.9	179.2	181.4
165°	165.5	167.7	169.9	176.6	178.7
167.5°	168.2	169.2	171.0	175.5	176.3
170°	169.9	171.0	171.0	175.4	175.4
172.5°	170.8	171.0	171.0	174.5	173.7
175°	172.1	172.1	171.0	173.2	173.2
177.5°	172.1	172.1	171.2	173.0	172.1
180°	172.1	172.1	172.1	172.1	172.1

(END OF REPORT)