

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

Summary

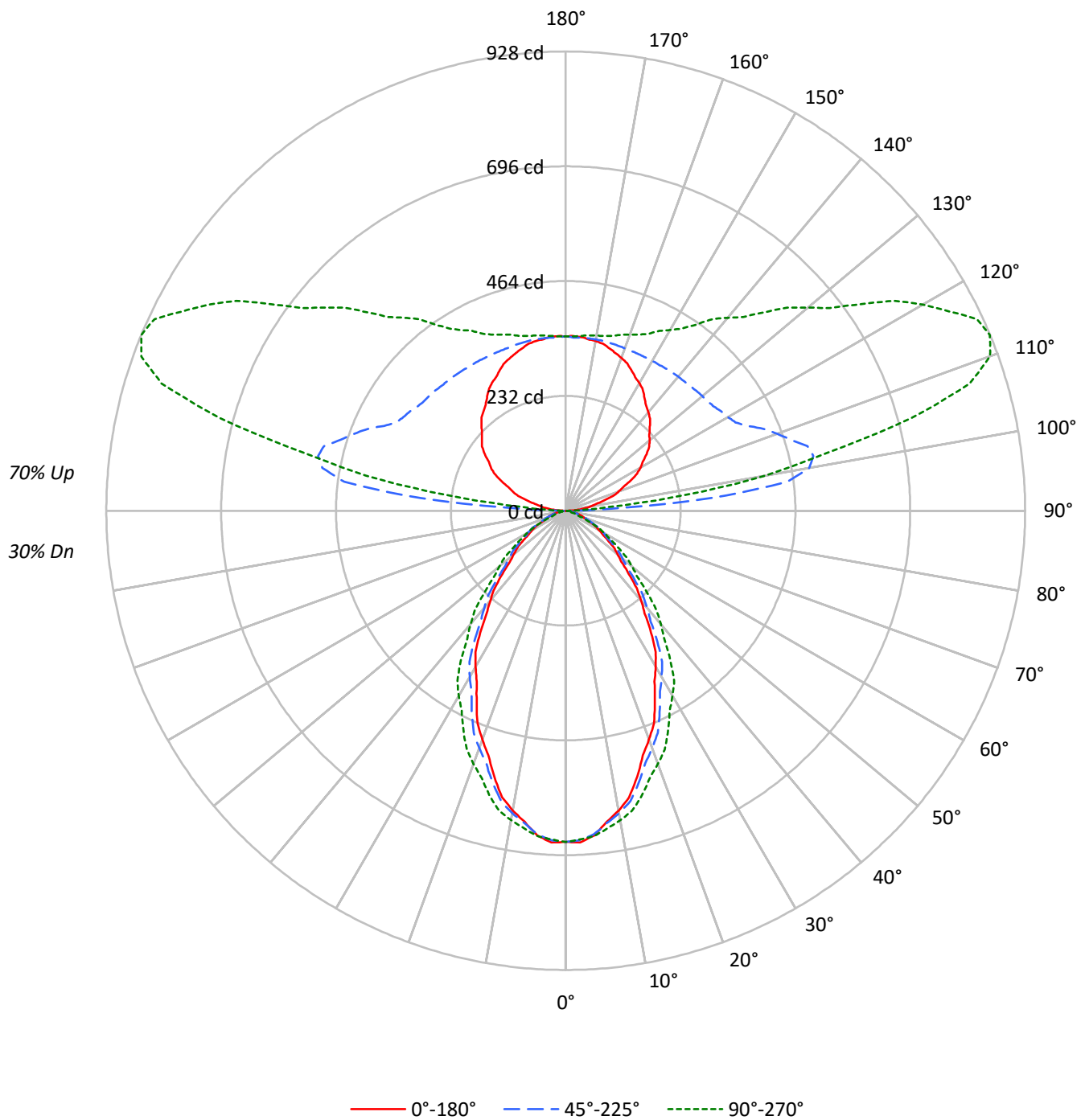
Lumens per Lamp: N/A
Luminaire Lumens: 3277.4 lumens
Efficiency: N/A
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44.8
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38
1	94	90	86	83	84	81	78	75	64	62	60	49	47	46	34	34	33
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29
3	79	70	64	58	71	64	58	53	51	47	44	39	37	34	28	27	25
4	73	63	55	50	65	57	51	46	46	41	38	35	32	30	26	24	22
5	67	56	49	43	60	51	45	40	41	37	33	32	29	26	23	22	20
6	62	50	43	38	55	46	39	35	37	33	29	29	26	24	21	20	18
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16
8	53	42	34	29	48	38	32	27	31	26	23	25	21	19	18	16	15
9	49	38	31	26	45	35	29	24	29	24	21	23	19	17	17	15	14
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12

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	1.9
10°-20°	159.7	4.9
20°-30°	206.9	6.3
30°-40°	202.6	6.2
40°-50°	155.1	4.7
50°-60°	103.3	3.2
60°-70°	56.4	1.7
70°-80°	23.5	0.7
80°-90°	8.0	0.2
90°-100°	169.1	5.2
100°-110°	459.5	14.0
110°-120°	472.4	14.4
120°-130°	377.7	11.5
130°-140°	296.8	9.1
140°-150°	227.6	6.9
150°-160°	163.7	5.0
160°-170°	100.1	3.1
170°-180°	33.7	1.0
0°-30°	428.0	13.1
0°-40°	630.5	19.2
0°-60°	888.9	27.1
0°-90°	976.8	29.8
90°-120°	1101.1	33.6
90°-150°	2003.2	61.1
90°-180°	2301.0	70.2
0°-180°	3277.4	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	4	8	10	10	2
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	

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-050U-050D-927-1D-UNV-STD-W-6

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	3.5	3.9	3.4	3.2
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

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-050U-050D-927-1D-UNV-STD-W-6

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)