

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: P854413

Luminaire Tested: SQ2-WBN-025U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854413
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-025U-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

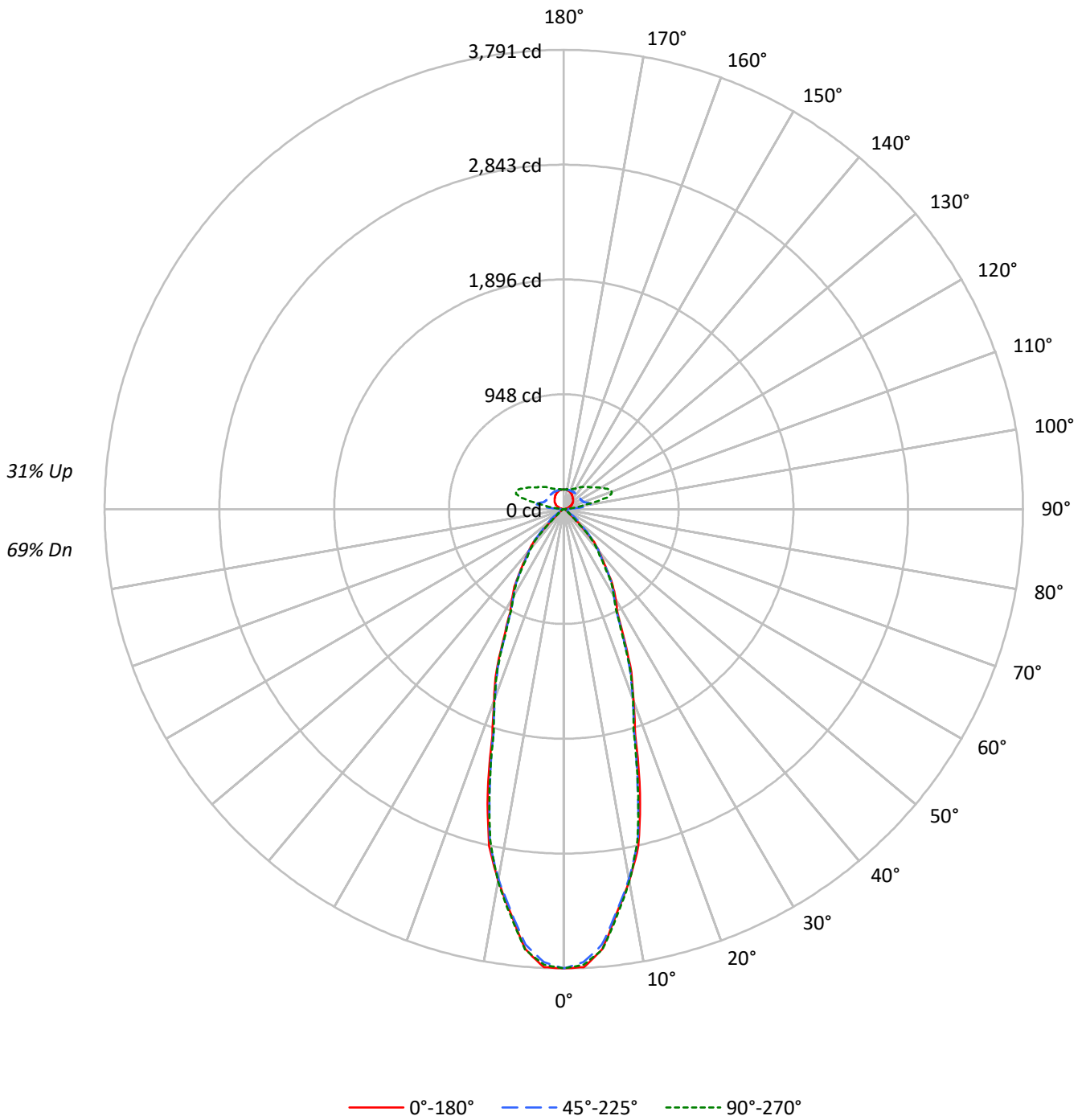
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3212.8 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 25.5
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		0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	69		
1	105	102	99	96	99	97	94	92	87	85	83	78	76	75	69	69	68	64		
2	99	93	89	85	93	89	85	81	80	77	75	73	71	69	66	64	63	59		
3	93	86	80	76	88	82	77	73	75	71	68	68	65	63	62	60	58	55		
4	87	79	73	68	83	76	70	66	69	65	62	64	61	58	58	56	54	51		
5	82	73	67	62	78	70	65	60	65	60	57	60	56	54	55	53	50	48		
6	77	68	62	57	74	65	60	56	61	56	53	56	53	50	52	49	47	45		
7	73	63	57	53	70	61	56	51	57	52	49	53	49	47	50	47	44	42		
8	69	59	53	49	66	58	52	48	54	49	46	50	47	44	47	44	42	40		
9	66	56	50	46	63	54	49	45	51	46	43	48	44	41	45	42	39	38		
10	63	53	47	43	60	51	46	42	48	44	40	45	42	39	43	40	37	36		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	61202	61202	61202
5°	59093	58504	59157
10°	51077	50836	51198
15°	40645	39363	39520
20°	28873	28493	28701
25°	20772	20366	20222
30°	15871	15446	15407
35°	12459	12246	11929
40°	9438	9312	8859
45°	5281	6311	4713
50°	1859	3886	1638
55°	1134	2120	1078
60°	869	1108	804
65°	795	821	745
70°	760	760	699
75°	711	711	674
80°	623	623	623
85°	630	500	500

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6311 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.0	10.2
10°-20°	653.9	20.4
20°-30°	541.6	16.9
30°-40°	389.6	12.1
40°-50°	198.5	6.2
50°-60°	51.7	1.6
60°-70°	21.4	0.7
70°-80°	11.9	0.4
80°-90°	3.9	0.1
90°-100°	65.9	2.1
100°-110°	205.1	6.4
110°-120°	200.7	6.2
120°-130°	163.8	5.1
130°-140°	134.0	4.2
140°-150°	104.6	3.3
150°-160°	75.5	2.3
160°-170°	46.1	1.4
170°-180°	15.6	0.5
0°-30°	1524.5	47.5
0°-40°	1914.1	59.6
0°-60°	2164.3	67.4
0°-90°	2201.5	68.5
90°-120°	471.7	14.7
90°-150°	874.1	27.2
90°-180°	1011.0	31.5
0°-180°	3212.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3791	3791	3791	3791	3791	
5°	3646	3641	3610	3662	3650	329
15°	2432	2404	2355	2372	2364	660
25°	1166	1164	1143	1133	1135	548
35°	632	636	621	611	605	397
45°	231	266	276	257	206	185
55°	40	47	75	44	38	40
65°	21	22	22	20	20	21
75°	11	11	11	11	11	12
85°	3	3	3	3	3	4
90°	0	1	3	3	3	1
95°	9	27	121	45	29	10
105°	36	51	202	386	368	38
115°	64	76	164	338	396	63
125°	89	99	162	266	312	79
135°	107	119	161	230	258	83
145°	125	135	161	198	216	79
155°	143	148	162	178	184	66
165°	157	158	163	168	170	44
175°	163	163	163	164	163	15
180°	163	163	163	163	163	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3790.6	3790.6	3790.6	3790.6	3790.6
2.5°	3784.7	3778.4	3742.2	3772.1	3764.8
5°	3646.0	3640.7	3609.7	3661.9	3650.0
7.5°	3359.7	3364.2	3346.0	3392.1	3379.5
10°	3115.4	3127.3	3100.7	3167.6	3122.8
12.5°	2845.9	2838.3	2819.8	2830.2	2805.4
15°	2431.6	2404.0	2354.9	2371.6	2364.3
17.5°	1958.6	1969.2	1926.7	1924.9	1916.7
20°	1680.4	1683.7	1658.3	1671.7	1670.4
22.5°	1456.7	1457.3	1424.8	1444.4	1432.6
25°	1166.0	1164.1	1143.2	1133.1	1135.1
27.5°	956.2	948.1	932.3	938.9	934.0
30°	851.3	844.7	828.5	832.4	826.4
32.5°	757.2	757.4	740.8	738.8	734.4
35°	632.1	636.0	621.3	611.1	605.2
37.5°	520.5	524.2	511.7	496.8	491.8
40°	447.8	450.5	441.8	424.2	420.3
42.5°	368.8	379.8	371.3	354.7	346.0
45°	231.3	266.2	276.4	257.1	206.4
47.5°	117.0	165.3	197.2	145.6	95.9
50°	74.0	107.5	154.7	87.6	65.2
52.5°	56.8	74.0	123.5	64.7	52.3
55°	40.3	46.9	75.3	43.6	38.3
57.5°	31.2	34.9	45.1	33.0	29.7
60°	26.9	29.5	34.3	28.2	24.9
62.5°	24.2	25.8	27.8	23.9	22.7
65°	20.8	21.5	21.5	20.2	19.5
67.5°	17.8	18.4	18.3	17.6	16.9
70°	16.1	16.8	16.1	15.5	14.8
72.5°	14.0	14.6	14.0	13.8	13.2
75°	11.4	11.4	11.4	10.8	10.8
77.5°	8.9	9.0	8.3	8.3	7.8
80°	6.7	7.4	6.7	6.7	6.7
82.5°	5.6	5.8	5.1	5.1	5.1
85°	3.4	3.4	2.7	3.3	2.7
87.5°	1.1	1.3	1.7	1.7	1.7
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.2	38.2	12.5	10.2
95°	9.0	26.6	121.0	44.6	29.0
97.5°	16.4	34.6	200.3	124.7	78.6
100°	22.0	38.6	225.9	211.3	141.0
102.5°	27.6	43.4	221.1	301.8	236.9
105°	36.0	50.7	201.9	385.5	367.9
107.5°	44.4	58.1	183.5	391.9	411.3
110°	50.0	63.7	173.9	382.7	420.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.6	68.5	169.1	366.2	414.5
115°	64.0	75.7	163.9	338.2	395.9
117.5°	72.2	82.9	161.7	311.4	370.5
120°	77.0	87.7	160.9	296.2	352.9
122.5°	81.8	92.5	161.7	283.3	335.3
125°	89.0	98.7	161.9	266.0	311.9
127.5°	94.8	104.7	161.9	253.0	292.1
130°	98.0	108.7	161.9	245.7	280.9
132.5°	102.0	112.7	161.1	239.3	272.1
135°	107.0	118.7	160.9	229.6	257.9
137.5°	112.8	123.5	160.9	219.9	245.7
140°	116.0	126.7	160.9	213.5	236.9
142.5°	120.0	129.9	160.9	207.0	228.1
145°	125.0	134.7	160.9	198.3	215.9
147.5°	131.0	139.4	161.9	190.3	204.1
150°	135.0	141.8	161.9	186.2	196.9
152.5°	138.2	144.2	161.9	182.1	191.3
155°	143.0	147.8	161.9	178.1	183.9
157.5°	147.8	151.5	161.9	174.4	178.1
160°	151.0	153.9	161.9	172.0	174.9
162.5°	153.3	155.5	161.9	170.4	172.5
165°	156.9	157.9	162.9	168.0	169.9
167.5°	159.1	159.3	161.9	166.6	167.5
170°	159.9	160.9	161.9	165.0	165.9
172.5°	161.5	161.7	162.7	164.2	164.3
175°	162.9	162.9	162.9	163.9	162.9
177.5°	162.9	162.9	162.9	162.9	162.9
180°	162.9	162.9	162.9	162.9	162.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	2.86	3.64	3.69	4.45	5.45	2.49	3.26	3.31	4.07	5.07
	3H	3.91	4.60	4.75	5.42	6.45	3.49	4.18	4.33	5.00	6.02
	4H	4.34	4.98	5.19	5.81	6.85	3.92	4.56	4.77	5.39	6.43
	6H	4.65	5.24	5.51	6.08	7.13	4.25	4.84	5.11	5.68	6.72
	8H	4.75	5.31	5.62	6.16	7.21	4.35	4.91	5.22	5.76	6.81
	12H	4.82	5.35	5.69	6.20	7.27	4.40	4.93	5.27	5.77	6.84
4H	2H	3.09	3.73	3.95	4.56	5.60	2.76	3.41	3.62	4.24	5.28
	3H	4.38	4.91	5.25	5.78	6.83	4.01	4.54	4.88	5.41	6.46
	4H	4.94	5.42	5.82	6.29	7.36	4.57	5.05	5.45	5.91	6.99
	6H	5.40	5.81	6.29	6.69	7.78	5.03	5.44	5.92	6.32	7.41
	8H	5.55	5.94	6.45	6.81	7.91	5.18	5.56	6.08	6.44	7.54
	12H	5.66	6.00	6.57	6.90	8.00	5.27	5.61	6.18	6.51	7.60
8H	4H	5.09	5.47	5.98	6.35	7.44	4.75	5.13	5.64	6.01	7.10
	6H	5.67	5.98	6.59	6.90	8.00	5.33	5.64	6.25	6.57	7.66
	8H	5.92	6.19	6.84	7.11	8.22	5.57	5.84	6.50	6.76	7.87
	12H	6.11	6.35	7.04	7.26	8.42	5.74	5.98	6.67	6.88	8.05
12H	4H	5.06	5.40	5.97	6.30	7.40	4.74	5.08	5.64	5.98	7.07
	6H	5.69	5.96	6.62	6.88	7.99	5.37	5.64	6.29	6.55	7.67
	8H	5.97	6.21	6.89	7.11	8.28	5.63	5.87	6.56	6.78	7.94