

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: P854473

Luminaire Tested: SQ2-WBN-125U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854473
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-125U-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

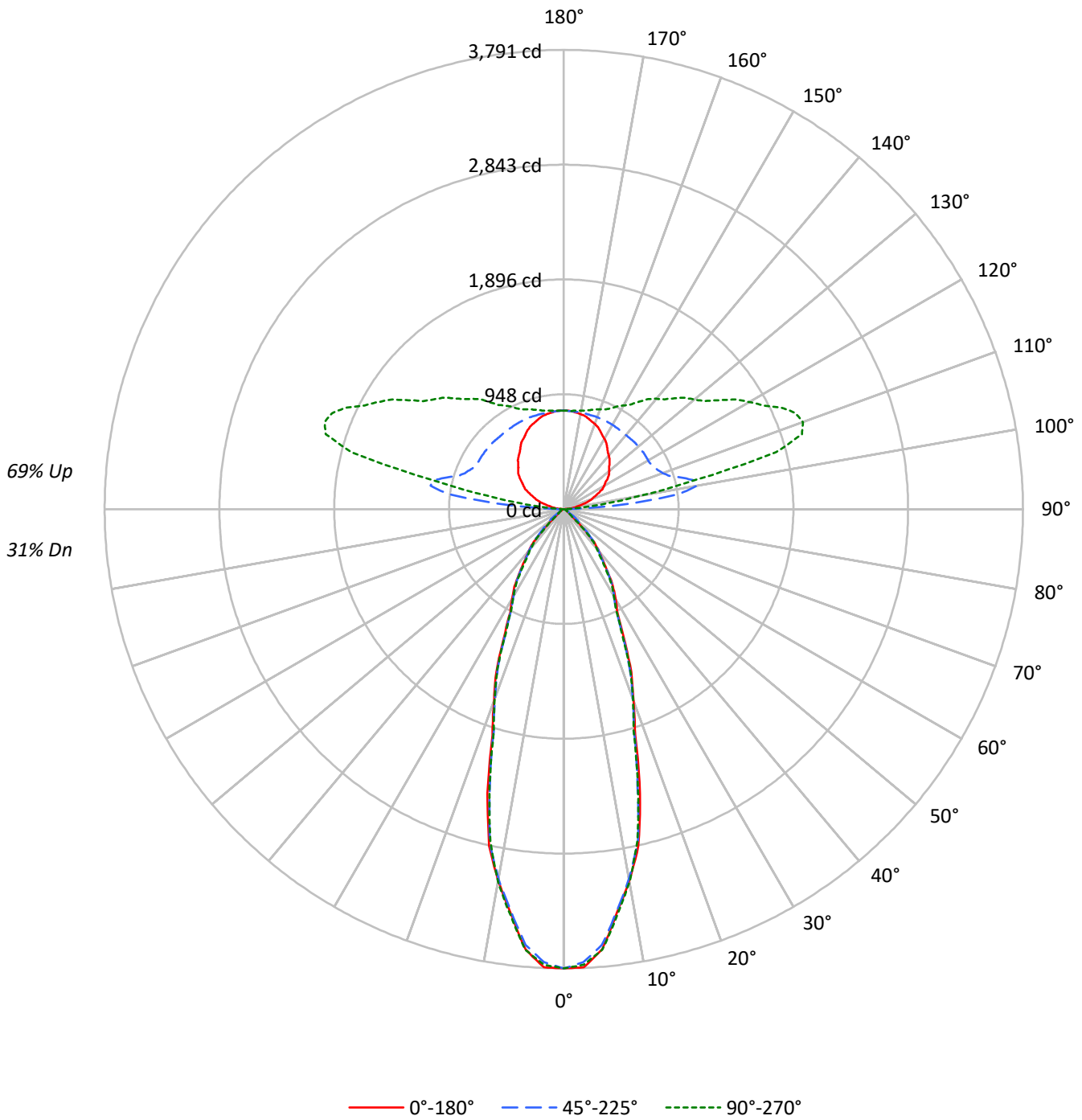
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7217.8 lumens
Efficiency: N/A
Efficacy: 116.4 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-Indirect

Input Watts (W): 62
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	0	
RCR																						
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31				
1	95	91	88	85	85	82	79	77	65	64	62	50	49	48	36	35	35	28				
2	88	81	76	72	79	74	69	66	59	56	54	46	44	43	34	33	32	26				
3	81	73	67	62	73	66	61	57	54	50	47	42	40	38	31	30	29	25				
4	75	66	59	54	68	60	55	50	49	45	42	39	36	34	29	28	27	23				
5	70	60	53	48	63	55	49	44	45	41	38	36	33	31	28	26	25	21				
6	65	55	48	43	59	50	44	40	41	37	34	33	31	29	26	24	23	20				
7	61	50	43	38	55	46	40	36	38	34	31	31	28	26	24	23	22	19				
8	57	46	39	35	52	42	37	33	36	31	28	29	26	24	23	21	20	18				
9	53	43	36	32	48	39	34	30	33	29	26	27	25	23	22	20	19	17				
10	50	40	33	29	46	37	31	27	31	27	24	26	23	21	21	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	61209	61209	61209
5°	59101	58511	59166
10°	51083	50841	51205
15°	40650	39368	39525
20°	28878	28496	28704
25°	20776	20368	20224
30°	15873	15448	15409
35°	12461	12248	11931
40°	9440	9314	8859
45°	5284	6311	4715
50°	1859	3886	1638
55°	1137	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°	329.1	4.6
10°-20°	654.0	9.1
20°-30°	541.6	7.5
30°-40°	389.6	5.4
40°-50°	198.5	2.8
50°-60°	51.7	0.7
60°-70°	21.4	0.3
70°-80°	11.9	0.2
80°-90°	4.4	0.1
90°-100°	311.0	4.3
100°-110°	1012.4	14.0
110°-120°	1001.4	13.9
120°-130°	818.4	11.3
130°-140°	668.9	9.3
140°-150°	521.0	7.2
150°-160°	375.5	5.2
160°-170°	229.5	3.2
170°-180°	77.4	1.1
0°-30°	1524.7	21.1
0°-40°	1914.4	26.5
0°-60°	2164.6	30.0
0°-90°	2202.3	30.5
90°-120°	2324.8	32.2
90°-150°	4333.0	60.0
90°-180°	5015.0	69.5
0°-180°	7217.8	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	2365	660
25°	1166	1164	1143	1133	1135	549
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	3	7	6	6	2
95°	42	128	570	203	125	49
105°	172	248	1003	1916	1814	183
115°	318	380	817	1684	1981	315
125°	442	493	806	1329	1567	393
135°	534	590	802	1147	1294	412
145°	624	670	800	988	1082	391
155°	712	735	805	885	918	328
165°	777	784	807	837	847	219
175°	810	810	810	816	814	77
180°	813	813	813	813	813	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3791.0	3791.0	3791.0	3791.0	3791.0
2.5°	3785.1	3778.8	3742.6	3772.6	3765.2
5°	3646.5	3641.2	3610.1	3662.3	3650.5
7.5°	3360.1	3364.6	3346.4	3392.5	3379.9
10°	3115.8	3127.7	3101.0	3167.9	3123.2
12.5°	2846.3	2838.6	2820.2	2830.5	2805.8
15°	2431.9	2404.2	2355.2	2371.8	2364.6
17.5°	1958.8	1969.5	1926.9	1925.1	1917.0
20°	1680.7	1683.9	1658.5	1671.9	1670.6
22.5°	1456.8	1457.5	1425.0	1444.6	1432.8
25°	1166.2	1164.2	1143.3	1133.3	1135.2
27.5°	956.3	948.2	932.4	939.0	934.1
30°	851.4	844.8	828.6	832.5	826.5
32.5°	757.3	757.5	740.9	738.9	734.5
35°	632.2	636.1	621.4	611.2	605.3
37.5°	520.5	524.2	511.8	496.9	491.9
40°	447.9	450.5	441.9	424.3	420.3
42.5°	368.8	379.9	371.4	354.8	346.1
45°	231.4	266.2	276.4	257.1	206.5
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°	40.4	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	1.7	2.5	2.3	2.3
90°	0.0	2.9	7.0	6.0	6.0
92.5°	14.4	51.7	165.4	54.5	42.0
95°	42.0	128.0	569.9	203.2	125.0
97.5°	79.0	166.6	967.3	589.1	359.6
100°	103.0	189.0	1116.9	995.9	645.9
102.5°	130.2	213.1	1098.5	1473.4	1120.3
105°	172.0	248.2	1002.9	1915.5	1813.8
107.5°	217.2	288.9	912.1	1953.8	2061.6
110°	250.0	315.5	868.9	1906.2	2100.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	277.2	341.9	841.7	1820.3	2071.2
115°	318.0	379.6	816.9	1683.6	1980.8
117.5°	360.0	415.5	807.3	1558.3	1854.2
120°	384.0	438.7	804.9	1481.3	1767.8
122.5°	407.2	461.1	805.7	1414.5	1681.4
125°	441.9	492.8	805.9	1329.2	1566.8
127.5°	471.7	523.8	805.7	1265.4	1463.4
130°	490.9	543.7	804.9	1228.9	1405.8
132.5°	507.7	562.9	804.1	1195.0	1361.0
135°	533.9	589.7	801.9	1147.2	1293.9
137.5°	559.5	615.7	799.7	1098.6	1228.9
140°	577.9	631.7	798.9	1065.7	1188.9
142.5°	595.5	647.0	798.9	1034.2	1144.1
145°	623.9	669.9	799.9	988.0	1081.9
147.5°	651.5	691.4	801.3	948.7	1021.3
150°	669.9	705.1	802.9	925.3	986.9
152.5°	688.3	717.3	803.7	907.4	956.5
155°	711.9	735.4	804.9	884.7	917.9
157.5°	734.3	751.1	806.1	867.8	891.1
160°	747.9	761.6	806.9	857.3	875.9
162.5°	759.9	770.5	806.9	848.4	862.3
165°	776.9	783.8	806.9	837.1	846.9
167.5°	788.9	793.2	807.1	828.6	833.7
170°	796.9	798.9	807.9	823.0	824.9
172.5°	802.5	803.7	809.5	819.7	819.3
175°	809.9	809.9	809.9	815.9	813.9
177.5°	812.9	812.1	811.3	815.2	812.1
180°	812.9	812.9	812.9	812.9	812.9



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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	0.00	0.00	0.08	0.66	2.20	0.00	0.00	0.00	0.28	1.82
	3H	0.00	0.53	1.12	1.64	3.20	0.00	0.10	0.70	1.22	2.77
	4H	0.40	0.92	1.55	2.04	3.59	0.00	0.50	1.13	1.61	3.17
	6H	0.71	1.19	1.87	2.31	3.87	0.31	0.78	1.46	1.90	3.47
	8H	0.81	1.26	1.97	2.39	3.95	0.40	0.86	1.57	1.99	3.55
	12H	0.87	1.30	2.04	2.43	4.01	0.45	0.88	1.61	2.01	3.59
4H	2H	0.00	0.00	0.31	0.79	2.34	0.00	0.00	0.00	0.46	2.02
	3H	0.44	0.87	1.60	2.02	3.58	0.07	0.50	1.23	1.64	3.21
	4H	1.00	1.40	2.16	2.53	4.12	0.63	1.02	1.79	2.16	3.74
	6H	1.45	1.79	2.62	2.94	4.52	1.08	1.42	2.25	2.58	4.16
	8H	1.61	1.93	2.78	3.07	4.66	1.24	1.55	2.40	2.70	4.29
	12H	1.72	2.00	2.90	3.16	4.75	1.32	1.60	2.50	2.76	4.36
8H	4H	1.14	1.46	2.31	2.60	4.20	0.81	1.12	1.97	2.27	3.86
	6H	1.73	1.99	2.91	3.18	4.77	1.39	1.65	2.58	2.84	4.43
	8H	1.98	2.20	3.17	3.37	4.98	1.63	1.86	2.82	3.02	4.63
	12H	2.17	2.37	3.36	3.53	5.17	1.80	1.99	2.99	3.16	4.80
12H	4H	1.11	1.40	2.29	2.56	4.15	0.79	1.07	1.97	2.23	3.83
	6H	1.76	1.98	2.95	3.15	4.76	1.43	1.65	2.62	2.82	4.43
	8H	2.03	2.22	3.22	3.39	5.03	1.69	1.89	2.88	3.05	4.70