

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: P854472

Luminaire Tested: SQ2-WBN-125U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854472
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-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

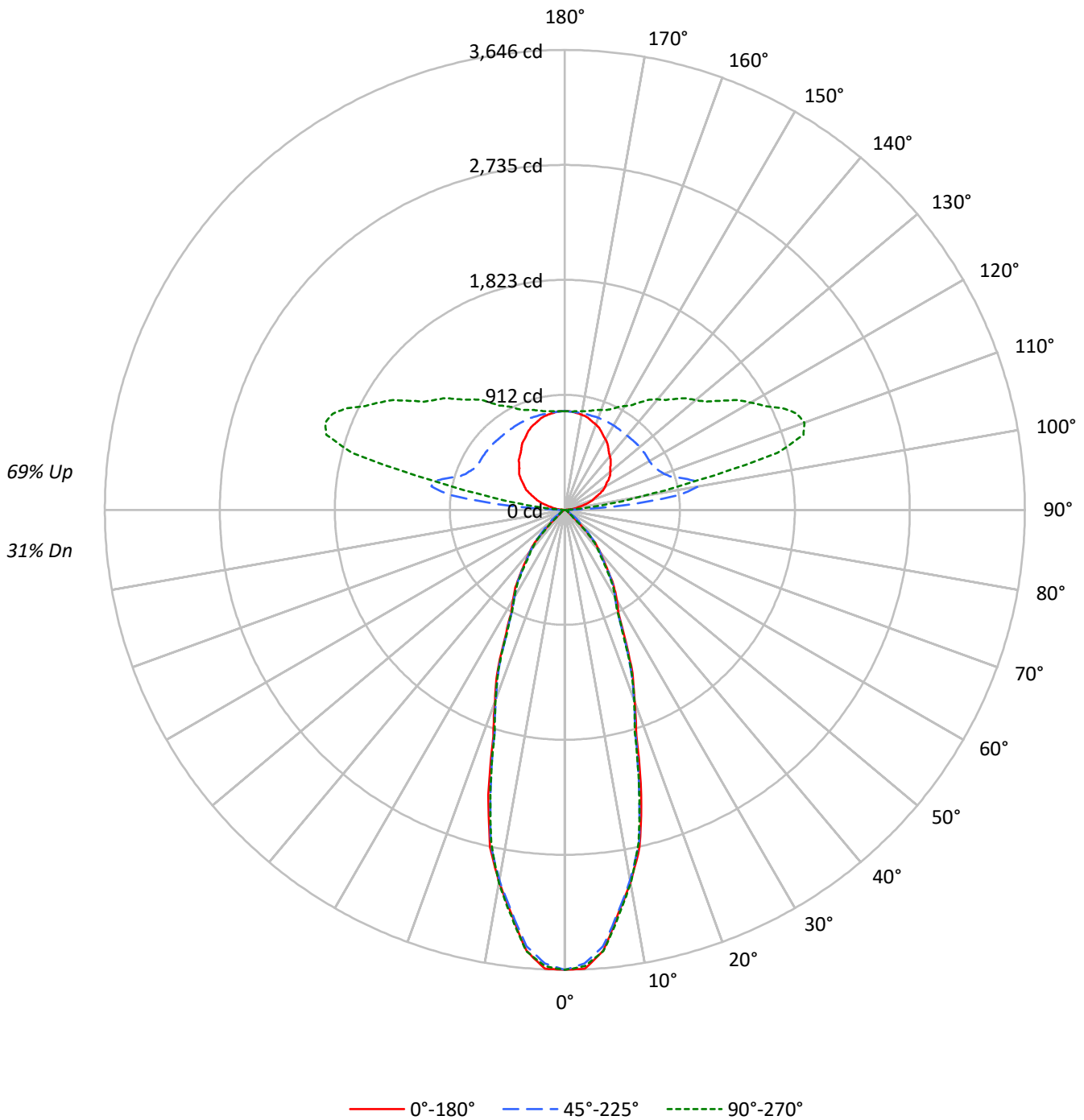
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6942.1 lumens
Efficiency: N/A
Efficacy: 112.0 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-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				31
1	95	91	88	85	85	82	79	77	65	64	62	50	49	48	36	35	35	28				28
2	88	81	76	72	79	74	69	66	59	56	54	46	44	43	34	33	32	26				26
3	81	73	67	62	73	66	61	57	54	50	47	42	40	38	31	30	29	25				25
4	75	66	59	54	68	60	55	50	49	45	42	39	36	34	29	28	27	23				23
5	70	60	53	48	63	55	49	44	45	41	38	36	33	31	28	26	25	21				21
6	65	55	48	43	59	50	44	40	41	37	34	33	31	29	26	24	23	20				20
7	61	50	43	38	55	46	40	36	38	34	31	31	28	26	24	23	22	19				19
8	57	46	39	35	52	42	37	33	36	31	28	29	26	24	23	21	20	18				18
9	53	43	36	32	48	39	34	30	33	29	26	27	25	23	22	20	19	17				17
10	50	40	33	29	46	37	31	27	31	27	24	26	23	21	21	19	18	16				16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58871	58871	58871
5°	56843	56276	56905
10°	49132	48899	49249
15°	39097	37864	38016
20°	27773	27407	27606
25°	19981	19589	19452
30°	15267	14857	14822
35°	11984	11781	11475
40°	9080	8958	8521
45°	5080	6069	4535
50°	1788	3738	1575
55°	1092	2038	1039
60°	836	1066	772
65°	768	791	718
70°	732	732	670
75°	686	686	643
80°	604	604	604
85°	593	482	482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6069 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.5	4.6
10°-20°	629.0	9.1
20°-30°	520.9	7.5
30°-40°	374.8	5.4
40°-50°	190.9	2.8
50°-60°	49.7	0.7
60°-70°	20.6	0.3
70°-80°	11.4	0.2
80°-90°	4.3	0.1
90°-100°	299.1	4.3
100°-110°	973.7	14.0
110°-120°	963.2	13.9
120°-130°	787.1	11.3
130°-140°	643.3	9.3
140°-150°	501.1	7.2
150°-160°	361.2	5.2
160°-170°	220.8	3.2
170°-180°	74.5	1.1
0°-30°	1466.5	21.1
0°-40°	1841.2	26.5
0°-60°	2081.9	30.0
0°-90°	2118.2	30.5
90°-120°	2236.0	32.2
90°-150°	4167.5	60.0
90°-180°	4824.0	69.5
0°-180°	6942.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3646	3646	3646	3646	3646	
5°	3507	3502	3472	3522	3511	316
15°	2339	2312	2265	2281	2274	635
25°	1122	1120	1100	1090	1092	528
35°	608	612	598	588	582	382
45°	222	256	266	247	199	178
55°	39	45	72	42	37	38
65°	20	21	21	19	19	20
75°	11	11	11	10	10	12
85°	3	3	3	3	3	3
90°	0	3	7	6	6	2
95°	40	123	548	195	120	47
105°	165	239	965	1842	1744	176
115°	306	365	786	1619	1905	303
125°	425	474	775	1278	1507	378
135°	514	567	771	1103	1244	397
145°	600	644	769	950	1040	376
155°	685	707	774	851	883	315
165°	747	754	776	805	814	210
175°	779	779	779	785	783	74
180°	782	782	782	782	782	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3646.2	3646.2	3646.2	3646.2	3646.2
2.5°	3640.5	3634.5	3599.6	3628.5	3621.4
5°	3507.2	3502.1	3472.2	3522.4	3511.0
7.5°	3231.7	3236.0	3218.5	3262.9	3250.7
10°	2996.8	3008.2	2982.6	3046.9	3003.9
12.5°	2737.5	2730.2	2712.4	2722.4	2698.6
15°	2339.0	2312.4	2265.2	2281.2	2274.3
17.5°	1884.0	1894.2	1853.3	1851.6	1843.7
20°	1616.4	1619.6	1595.1	1608.0	1606.7
22.5°	1401.2	1401.8	1370.5	1389.4	1378.0
25°	1121.6	1119.7	1099.6	1090.0	1091.9
27.5°	919.8	912.0	896.8	903.1	898.5
30°	818.9	812.6	796.9	800.7	795.0
32.5°	728.3	728.6	712.6	710.6	706.5
35°	608.0	611.8	597.7	587.8	582.2
37.5°	500.7	504.2	492.2	477.9	473.1
40°	430.8	433.3	425.0	408.1	404.3
42.5°	354.7	365.4	357.2	341.2	332.9
45°	222.5	256.0	265.8	247.3	198.6
47.5°	112.5	159.0	189.7	140.1	92.2
50°	71.2	103.4	148.8	84.2	62.7
52.5°	54.6	71.2	118.8	62.2	50.3
55°	38.8	45.1	72.4	41.9	36.9
57.5°	30.0	33.6	43.3	31.8	28.6
60°	25.9	28.4	33.0	27.1	23.9
62.5°	23.3	24.8	26.8	23.0	21.9
65°	20.1	20.7	20.7	19.4	18.8
67.5°	17.1	17.7	17.6	16.9	16.3
70°	15.5	16.2	15.5	14.9	14.2
72.5°	13.5	14.1	13.5	13.3	12.7
75°	11.0	11.0	11.0	10.3	10.3
77.5°	8.5	8.7	8.0	8.0	7.5
80°	6.5	7.1	6.5	6.5	6.5
82.5°	5.4	5.6	4.9	4.9	4.9
85°	3.2	3.2	2.6	3.2	2.6
87.5°	1.0	1.6	2.4	2.2	2.2
90°	0.0	2.8	6.7	5.8	5.8
92.5°	13.8	49.8	159.1	52.4	40.4
95°	40.4	123.1	548.2	195.4	120.2
97.5°	76.0	160.2	930.3	566.6	345.8
100°	99.1	181.8	1074.2	957.9	621.3
102.5°	125.2	205.0	1056.5	1417.1	1077.5
105°	165.4	238.8	964.6	1842.3	1744.5
107.5°	208.9	277.9	877.3	1879.2	1982.8
110°	240.4	303.4	835.7	1833.4	2020.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.6	328.8	809.5	1750.8	1992.0
115°	305.8	365.1	785.7	1619.2	1905.1
117.5°	346.2	399.6	776.5	1498.8	1783.4
120°	369.3	421.9	774.2	1424.8	1700.3
122.5°	391.6	443.5	774.9	1360.5	1617.2
125°	425.1	474.0	775.1	1278.5	1507.0
127.5°	453.7	503.7	774.9	1217.0	1407.5
130°	472.2	523.0	774.2	1181.9	1352.1
132.5°	488.3	541.4	773.4	1149.4	1309.0
135°	513.5	567.1	771.3	1103.4	1244.4
137.5°	538.2	592.1	769.2	1056.7	1181.9
140°	555.9	607.6	768.4	1025.0	1143.4
142.5°	572.8	622.2	768.4	994.7	1100.4
145°	600.1	644.3	769.4	950.3	1040.5
147.5°	626.6	665.0	770.7	912.5	982.3
150°	644.3	678.2	772.2	889.9	949.2
152.5°	662.0	689.9	773.0	872.7	920.0
155°	684.7	707.3	774.2	850.9	882.8
157.5°	706.3	722.4	775.3	834.7	857.1
160°	719.3	732.5	776.1	824.6	842.4
162.5°	730.9	741.0	776.1	816.0	829.4
165°	747.2	753.8	776.1	805.1	814.5
167.5°	758.8	762.9	776.3	797.0	801.9
170°	766.5	768.3	777.0	791.5	793.4
172.5°	771.9	773.0	778.6	788.4	788.0
175°	779.0	779.0	779.0	784.7	782.8
177.5°	781.9	781.1	780.3	784.1	781.1
180°	781.9	781.9	781.9	781.9	781.9



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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	0.00	0.53	2.06	0.00	0.00	0.00	0.14	1.68
	3H	0.00	0.40	0.99	1.51	3.07	0.00	0.00	0.56	1.08	2.63
	4H	0.27	0.79	1.42	1.91	3.47	0.00	0.35	0.98	1.47	3.03
	6H	0.59	1.06	1.74	2.18	3.75	0.16	0.64	1.32	1.76	3.33
	8H	0.68	1.13	1.84	2.27	3.83	0.26	0.72	1.42	1.85	3.41
	12H	0.74	1.17	1.91	2.30	3.88	0.31	0.74	1.47	1.87	3.45
4H	2H	0.00	0.00	0.18	0.65	2.21	0.00	0.00	0.00	0.32	1.88
	3H	0.31	0.74	1.47	1.89	3.45	0.00	0.36	1.09	1.50	3.07
	4H	0.88	1.27	2.04	2.40	3.99	0.48	0.88	1.64	2.01	3.60
	6H	1.33	1.67	2.50	2.82	4.40	0.94	1.28	2.11	2.44	4.01
	8H	1.49	1.80	2.65	2.95	4.54	1.10	1.42	2.27	2.56	4.16
	12H	1.59	1.87	2.77	3.03	4.62	1.18	1.47	2.36	2.63	4.22
8H	4H	1.02	1.33	2.18	2.48	4.07	0.66	0.98	1.83	2.12	3.72
	6H	1.61	1.86	2.79	3.05	4.64	1.25	1.51	2.44	2.70	4.29
	8H	1.85	2.08	3.04	3.24	4.86	1.50	1.72	2.69	2.89	4.50
	12H	2.04	2.23	3.23	3.40	5.04	1.67	1.86	2.86	3.03	4.67
12H	4H	0.99	1.27	2.17	2.43	4.03	0.65	0.93	1.83	2.09	3.68
	6H	1.63	1.85	2.82	3.02	4.63	1.29	1.52	2.48	2.68	4.29
	8H	1.90	2.10	3.09	3.26	4.90	1.56	1.76	2.75	2.92	4.57