

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: P854457

Luminaire Tested: SQ2-WBN-0U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854457
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-WBN-0U-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

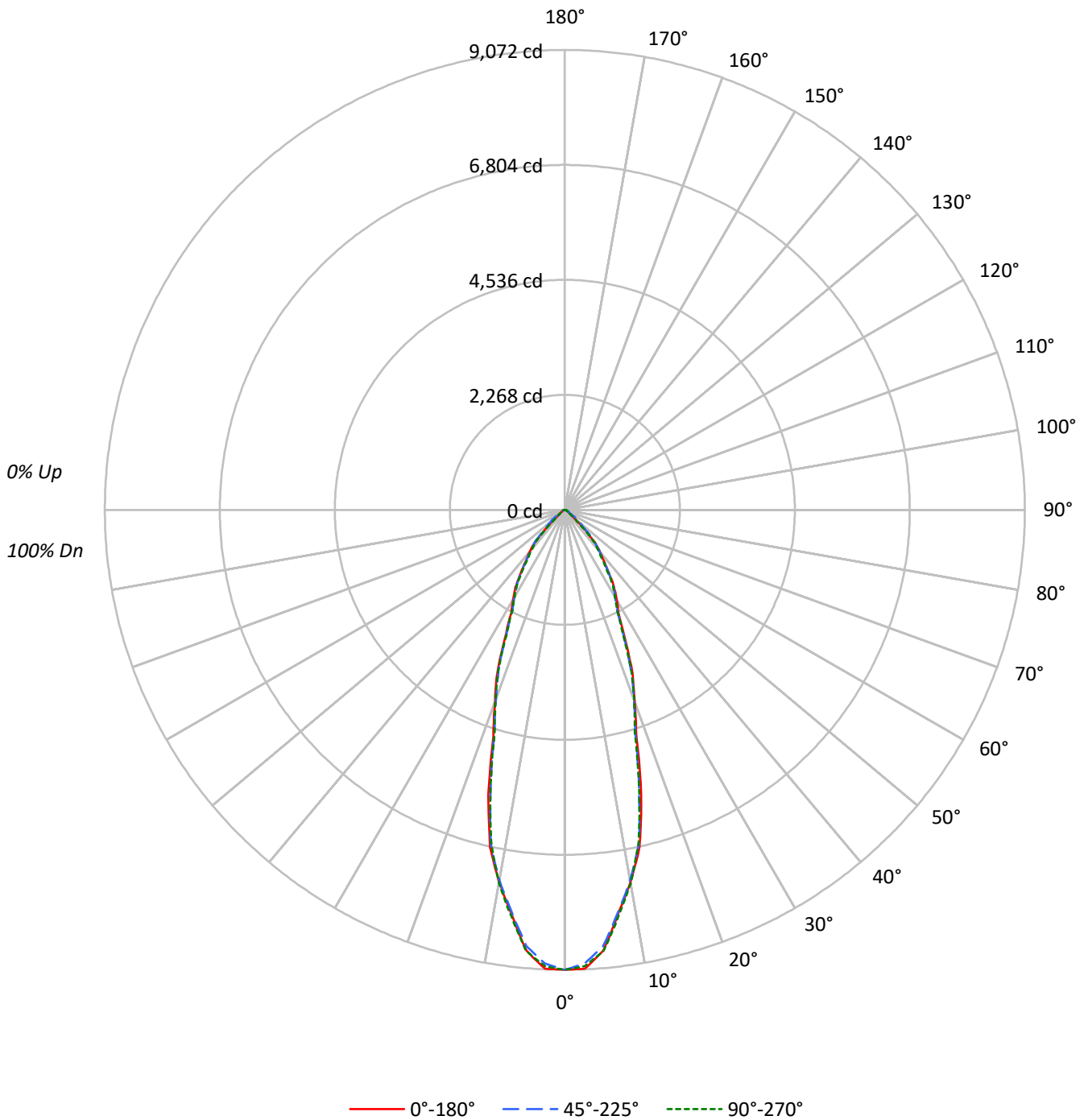
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5268.3 lumens
Efficiency: N/A
Efficacy: 106.0 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: Direct

Input Watts (W): 49.7
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81
4	97	90	84	80	95	88	83	79	86	82	78	84	81	78	82	79	77	75
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70
6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62
8	80	71	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58
9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	57	55
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	146483	146483	146483
5°	141435	140026	141590
10°	122250	121670	122541
15°	97280	94213	94591
20°	69106	68194	68692
25°	49718	48744	48400
30°	37988	36968	36877
35°	29820	29311	28551
40°	22592	22287	21201
45°	12643	15104	11282
50°	4446	9299	3921
55°	2719	5075	2581
60°	2080	2651	1921
65°	1906	1968	1784
70°	1822	1822	1671
75°	1709	1709	1609
80°	1497	1497	1497
85°	1482	1186	1186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15104 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	787.5	14.9
10°-20°	1565.2	29.7
20°-30°	1296.2	24.6
30°-40°	932.5	17.7
40°-50°	475.0	9.0
50°-60°	123.7	2.3
60°-70°	51.3	1.0
70°-80°	28.5	0.5
80°-90°	8.4	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3648.9	69.3
0°-40°	4581.3	87.0
0°-60°	5180.1	98.3
0°-90°	5268.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5268.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9072	9072	9072	9072	9072	
5°	8726	8714	8640	8764	8736	787
15°	5820	5754	5636	5676	5659	1580
25°	2791	2786	2736	2712	2717	1313
35°	1513	1522	1487	1463	1448	949
45°	554	637	662	615	494	442
55°	97	112	180	104	92	95
65°	50	52	52	48	47	50
75°	27	27	27	26	26	29
85°	8	8	6	8	6	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9072.5	9072.5	9072.5	9072.5	9072.5
2.5°	9058.4	9043.2	8956.6	9028.3	9010.7
5°	8726.5	8713.9	8639.6	8764.5	8736.1
7.5°	8041.2	8051.9	8008.3	8118.7	8088.5
10°	7456.6	7484.9	7421.2	7581.3	7474.3
12.5°	6811.5	6793.3	6749.1	6773.8	6714.7
15°	5819.8	5753.7	5636.3	5676.2	5658.9
17.5°	4687.7	4713.2	4611.4	4607.1	4587.6
20°	4022.0	4029.9	3968.9	4001.0	3997.9
22.5°	3486.4	3488.0	3410.1	3457.1	3428.8
25°	2790.8	2786.1	2736.1	2712.0	2716.8
27.5°	2288.6	2269.1	2231.4	2247.2	2235.5
30°	2037.6	2021.8	1982.9	1992.2	1978.0
32.5°	1812.2	1812.9	1773.0	1768.2	1757.8
35°	1512.9	1522.3	1487.1	1462.7	1448.5
37.5°	1245.7	1254.5	1224.8	1189.1	1177.2
40°	1071.9	1078.2	1057.4	1015.4	1005.9
42.5°	882.6	909.1	888.7	849.0	828.2
45°	553.7	637.1	661.5	615.3	494.1
47.5°	280.0	395.6	471.9	348.5	229.5
50°	177.0	257.3	370.2	209.6	156.1
52.5°	135.8	177.1	295.5	154.8	125.2
55°	96.6	112.3	180.3	104.3	91.7
57.5°	74.7	83.5	107.8	79.0	71.1
60°	64.4	70.7	82.1	67.4	59.5
62.5°	57.9	61.7	66.6	57.2	54.4
65°	49.9	51.5	51.5	48.2	46.7
67.5°	42.5	44.1	43.8	42.1	40.6
70°	38.6	40.2	38.6	37.0	35.4
72.5°	33.5	35.1	33.5	33.1	31.5
75°	27.4	27.4	27.4	25.8	25.8
77.5°	21.2	21.6	20.0	19.9	18.7
80°	16.1	17.7	16.1	16.1	16.1
82.5°	13.5	13.8	12.2	12.2	12.2
85°	8.0	8.0	6.4	8.0	6.4
87.5°	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0



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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	8.52	9.58	8.89	9.90	10.21	8.13	9.19	8.50	9.51	9.82
	3H	9.58	10.51	9.96	10.85	11.21	9.14	10.08	9.53	10.41	10.78
	4H	10.02	10.88	10.42	11.23	11.62	9.58	10.44	9.99	10.80	11.18
	6H	10.34	11.13	10.76	11.50	11.90	9.92	10.71	10.34	11.08	11.48
	8H	10.44	11.19	10.88	11.58	11.99	10.03	10.77	10.46	11.16	11.57
	12H	10.51	11.22	10.95	11.61	12.04	10.08	10.79	10.52	11.17	11.60
4H	2H	8.76	9.63	9.17	9.98	10.37	8.43	9.30	8.84	9.65	10.04
	3H	10.07	10.77	10.49	11.18	11.58	9.69	10.39	10.10	10.80	11.20
	4H	10.63	11.26	11.07	11.68	12.13	10.24	10.87	10.68	11.29	11.74
	6H	11.09	11.63	11.56	12.08	12.55	10.71	11.25	11.18	11.70	12.17
	8H	11.24	11.74	11.72	12.19	12.67	10.86	11.36	11.34	11.81	12.28
	12H	11.36	11.79	11.85	12.28	12.75	10.96	11.39	11.45	11.87	12.35
8H	4H	10.78	11.27	11.25	11.73	12.20	10.43	10.93	10.90	11.38	11.85
	6H	11.36	11.76	11.87	12.26	12.75	11.01	11.41	11.52	11.91	12.40
	8H	11.59	11.95	12.12	12.47	12.97	11.24	11.60	11.77	12.12	12.61
	12H	11.79	12.10	12.31	12.60	13.18	11.42	11.73	11.94	12.23	12.81
12H	4H	10.76	11.19	11.25	11.68	12.16	10.42	10.85	10.91	11.34	11.82
	6H	11.37	11.73	11.90	12.25	12.74	11.03	11.39	11.56	11.91	12.41
	8H	11.65	11.96	12.17	12.46	13.04	11.32	11.63	11.84	12.12	12.70