

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: P854458

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

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854458
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-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

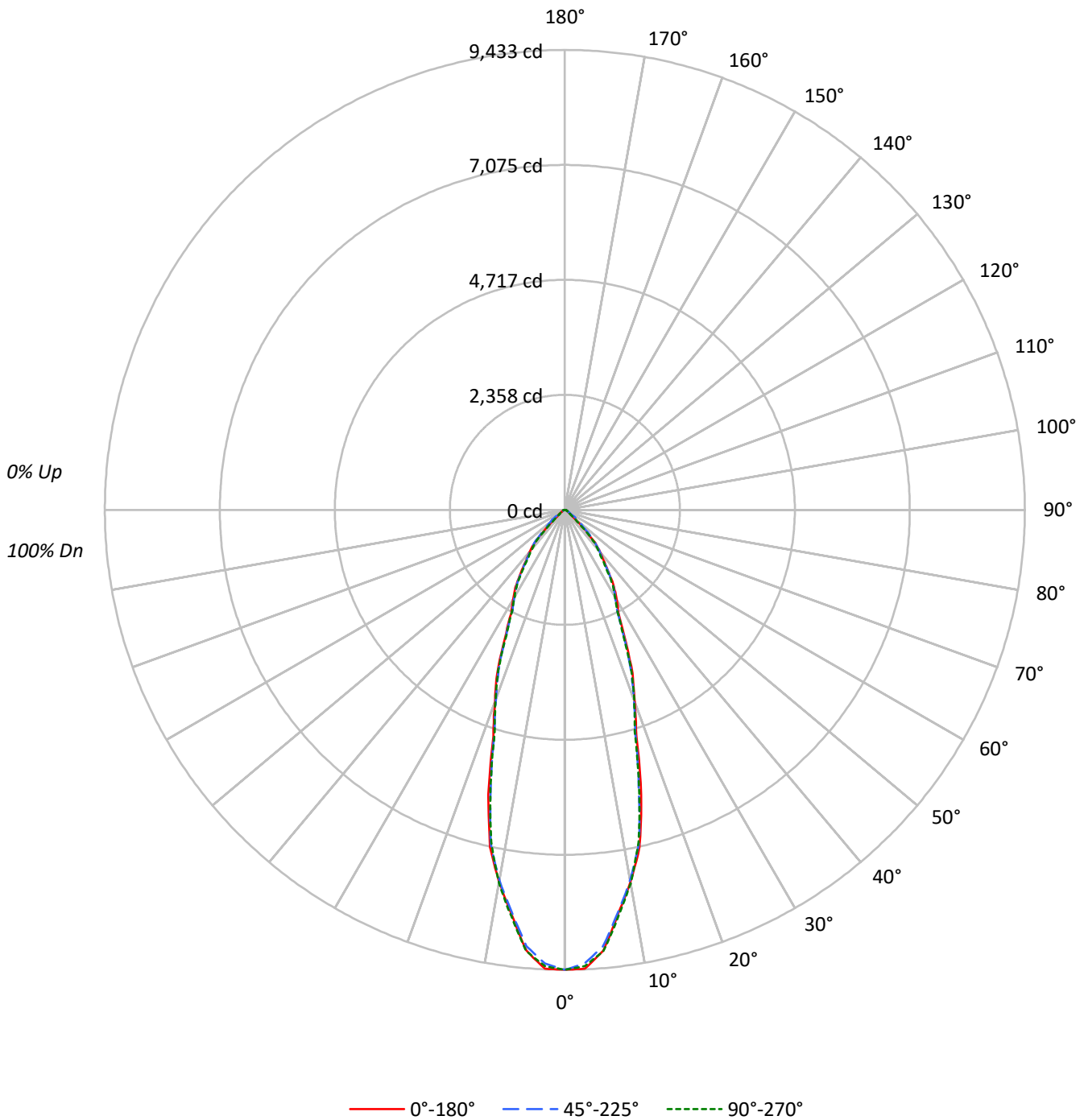
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5477.5 lumens
Efficiency: N/A
Efficacy: 110.2 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°	152302	152302	152302
5°	147052	145587	147214
10°	127107	126503	127408
15°	101145	97956	98347
20°	71852	70903	71421
25°	51692	50680	50322
30°	39496	38436	38342
35°	31005	30476	29684
40°	23490	23172	22044
45°	13143	15705	11730
50°	4624	9668	4077
55°	2826	5275	2685
60°	2160	2754	1999
65°	1983	2044	1853
70°	1898	1898	1737
75°	1772	1772	1672
80°	1553	1553	1553
85°	1556	1241	1241

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15705 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	818.8	14.9
10°-20°	1627.4	29.7
20°-30°	1347.7	24.6
30°-40°	969.5	17.7
40°-50°	493.9	9.0
50°-60°	128.6	2.3
60°-70°	53.3	1.0
70°-80°	29.6	0.5
80°-90°	8.8	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°	3793.8	69.3
0°-40°	4763.3	87.0
0°-60°	5385.8	98.3
0°-90°	5477.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5477.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9433	9433	9433	9433	9433	
5°	9073	9060	8983	9113	9083	818
15°	6051	5982	5860	5902	5884	1643
25°	2902	2897	2845	2820	2825	1365
35°	1573	1583	1546	1521	1506	987
45°	576	662	688	640	514	460
55°	100	117	187	108	95	99
65°	52	54	54	50	48	52
75°	28	28	28	27	27	30
85°	8	8	7	8	7	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9432.9	9432.9	9432.9	9432.9	9432.9
2.5°	9418.1	9402.4	9312.4	9386.9	9368.6
5°	9073.1	9060.0	8982.7	9112.6	9083.1
7.5°	8360.6	8371.7	8326.4	8441.2	8409.8
10°	7752.8	7782.2	7716.0	7882.5	7771.2
12.5°	7082.1	7063.1	7017.2	7042.9	6981.4
15°	6051.0	5982.2	5860.2	5901.6	5883.6
17.5°	4873.9	4900.4	4794.6	4790.1	4769.8
20°	4181.8	4190.0	4126.6	4160.0	4156.7
22.5°	3624.9	3626.5	3545.6	3594.4	3565.0
25°	2901.6	2896.7	2844.8	2819.8	2824.7
27.5°	2379.6	2359.3	2320.0	2336.4	2324.3
30°	2118.5	2102.1	2061.6	2071.3	2056.6
32.5°	1884.2	1884.9	1843.4	1838.5	1827.7
35°	1573.0	1582.8	1546.2	1520.8	1506.0
37.5°	1295.2	1304.4	1273.4	1236.3	1223.9
40°	1114.5	1121.0	1099.4	1055.7	1045.9
42.5°	917.7	945.2	924.0	882.7	861.1
45°	575.6	662.4	687.8	639.7	513.7
47.5°	291.2	411.3	490.6	362.3	238.6
50°	184.1	267.5	384.9	217.9	162.3
52.5°	141.2	184.1	307.2	160.9	130.2
55°	100.4	116.8	187.4	108.5	95.4
57.5°	77.6	86.8	112.1	82.1	74.0
60°	66.9	73.5	85.3	70.1	61.9
62.5°	60.2	64.2	69.3	59.5	56.6
65°	51.9	53.5	53.5	50.2	48.5
67.5°	44.2	45.8	45.5	43.8	42.2
70°	40.2	41.8	40.2	38.5	36.8
72.5°	34.8	36.4	34.8	34.4	32.8
75°	28.4	28.4	28.4	26.8	26.8
77.5°	22.1	22.4	20.7	20.7	19.4
80°	16.7	18.4	16.7	16.7	16.7
82.5°	14.1	14.4	12.7	12.7	12.7
85°	8.4	8.4	6.7	8.3	6.7
87.5°	2.7	2.7	2.7	2.7	2.7
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	8.66	9.72	9.02	10.03	10.35	8.27	9.33	8.64	9.64	9.96
	3H	9.72	10.65	10.10	10.98	11.35	9.28	10.21	9.66	10.55	10.92
	4H	10.15	11.01	10.56	11.37	11.76	9.72	10.58	10.12	10.93	11.32
	6H	10.47	11.26	10.89	11.63	12.03	10.06	10.84	10.47	11.22	11.62
	8H	10.58	11.32	11.01	11.71	12.12	10.16	10.90	10.60	11.30	11.71
	12H	10.65	11.36	11.08	11.74	12.17	10.22	10.92	10.65	11.31	11.74
4H	2H	8.90	9.76	9.30	10.11	10.50	8.57	9.43	8.98	9.78	10.17
	3H	10.21	10.91	10.62	11.31	11.72	9.82	10.52	10.24	10.93	11.34
	4H	10.77	11.39	11.20	11.81	12.26	10.38	11.00	10.82	11.43	11.88
	6H	11.22	11.76	11.69	12.21	12.68	10.85	11.38	11.31	11.83	12.30
	8H	11.37	11.87	11.85	12.32	12.80	11.00	11.49	11.47	11.94	12.42
	12H	11.49	11.92	11.98	12.41	12.89	11.09	11.52	11.58	12.01	12.49
8H	4H	10.91	11.41	11.38	11.86	12.33	10.56	11.06	11.04	11.51	11.98
	6H	11.49	11.89	12.00	12.39	12.88	11.14	11.54	11.65	12.04	12.53
	8H	11.72	12.08	12.25	12.60	13.10	11.37	11.73	11.90	12.25	12.74
	12H	11.93	12.24	12.45	12.73	13.31	11.55	11.86	12.07	12.36	12.94
12H	4H	10.89	11.32	11.38	11.81	12.29	10.56	10.99	11.05	11.48	11.95
	6H	11.50	11.86	12.03	12.38	12.87	11.17	11.52	11.70	12.04	12.54
	8H	11.79	12.10	12.31	12.59	13.17	11.45	11.76	11.97	12.25	12.83