

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:

Luminaire Tested: SQ4-FB-0U-125D-830-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-125D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

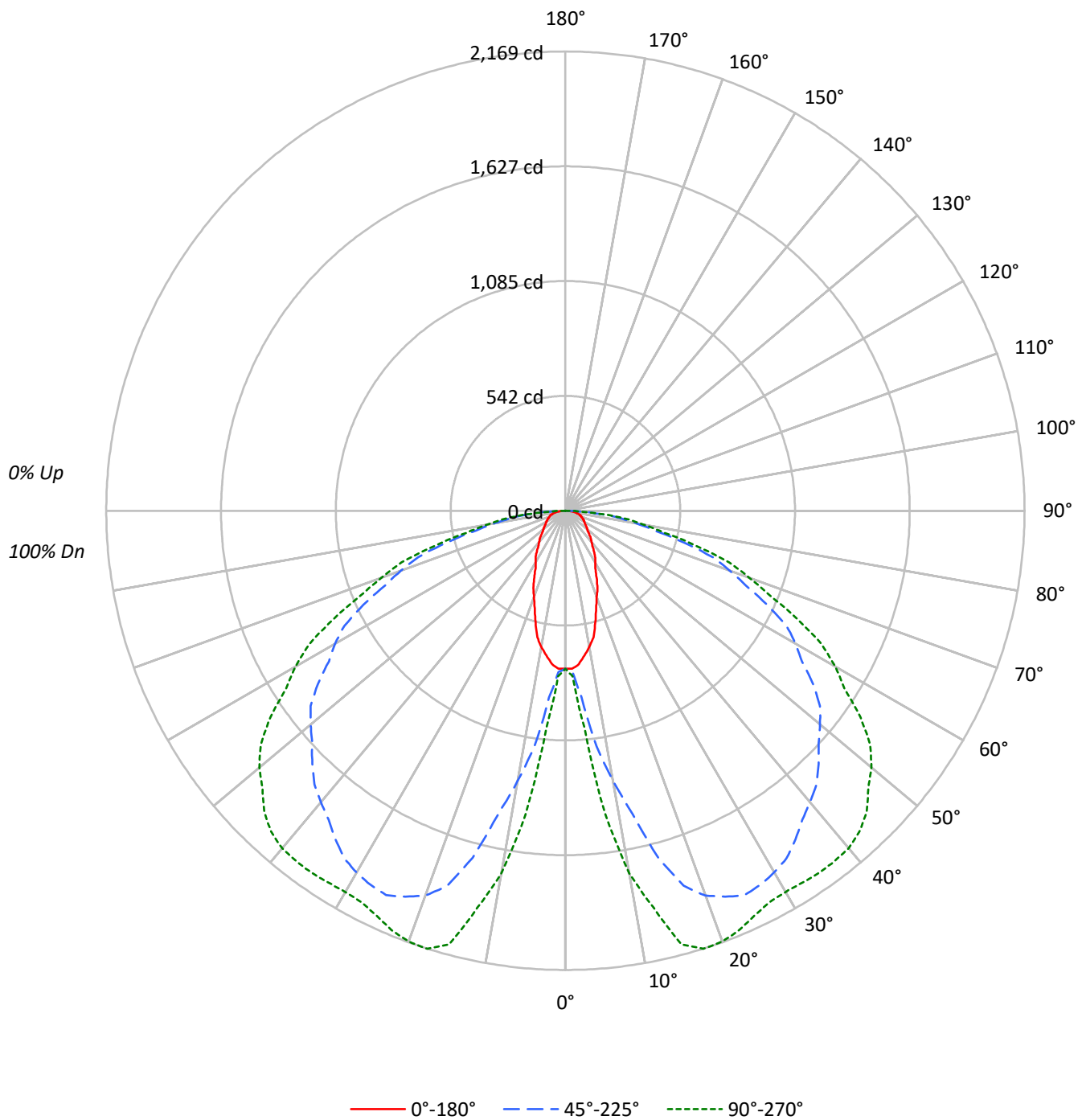
Lumens per Lamp: N/A
Luminaire Lumens: 5778.1 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4592	4592	4592
5°	4491	5462	6359
10°	4078	8082	10856
15°	3470	10801	13499
20°	2828	12658	14174
25°	2362	13596	14322
30°	1995	14016	14766
35°	1767	14223	15683
40°	1542	14428	16712
45°	1399	14712	17500
50°	1286	15024	18057
55°	1235	15305	18253
60°	1270	15446	18104
65°	1327	15321	17575
70°	1424	14852	16622
75°	1597	13779	15233
80°	1785	11905	13265
85°	1694	9908	11348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 18328 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.9	1.7
10°-20°	426.5	7.4
20°-30°	747.5	12.9
30°-40°	962.5	16.7
40°-50°	1074.6	18.6
50°-60°	1030.5	17.8
60°-70°	820.1	14.2
70°-80°	483.1	8.4
80°-90°	135.4	2.3
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°	1271.9	22.0
0°-40°	2234.4	38.7
0°-60°	4339.5	75.1
0°-90°	5778.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5778.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	727	780	885	998	1030	67
15°	545	1001	1696	2051	2120	151
25°	348	1136	2003	2107	2110	161
35°	235	1065	1894	2009	2089	147
45°	161	836	1691	1922	2012	125
55°	115	558	1427	1650	1702	105
65°	91	365	1053	1188	1208	90
75°	67	230	580	632	641	70
85°	24	62	140	158	161	27
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	746.6	746.6	746.6	746.6	746.6	746.6	746.6	746.6	746.6	746.6
2.5°	746.6	746.6	750.5	756.2	758.2	765.8	777.4	783.1	787.0	783.1
5°	727.4	737.0	768.2	813.9	859.5	909.9	974.7	1005.9	1025.1	1029.9
7.5°	689.5	715.9	804.7	923.8	1056.3	1187.9	1301.7	1393.9	1447.6	1450.0
10°	653.0	698.6	835.5	1017.9	1200.4	1387.6	1543.7	1639.7	1716.5	1738.1
12.5°	612.7	681.3	868.1	1112.0	1361.7	1572.0	1745.3	1851.0	1912.4	1920.6
15°	545.0	645.8	914.7	1260.4	1570.1	1822.2	1987.8	2071.8	2110.3	2119.9
17.5°	482.1	614.1	955.5	1376.6	1743.4	1970.5	2096.3	2149.1	2168.3	2169.3
20°	432.1	583.4	974.7	1457.3	1831.8	2035.8	2127.1	2160.7	2170.3	2165.5
22.5°	395.6	550.7	986.2	1511.0	1885.5	2060.8	2129.0	2145.3	2149.1	2144.3
25°	348.1	497.0	986.7	1582.1	1939.8	2067.0	2103.0	2107.9	2112.7	2110.3
27.5°	305.9	436.9	972.3	1629.1	1947.5	2037.7	2054.6	2066.6	2081.4	2084.8
30°	280.9	398.5	953.1	1644.5	1939.8	2007.0	2023.8	2045.4	2071.8	2079.0
32.5°	261.7	362.0	924.3	1646.4	1920.6	1970.5	1993.1	2033.9	2071.8	2082.9
35°	235.3	307.3	876.3	1632.5	1877.4	1911.0	1959.0	2026.2	2076.6	2088.6
37.5°	209.3	267.9	811.0	1604.2	1820.7	1855.8	1935.0	2016.1	2072.3	2087.2
40°	192.1	244.9	761.0	1577.3	1776.5	1817.4	1915.8	2004.6	2064.6	2081.4
42.5°	178.6	225.7	707.3	1542.7	1726.6	1782.8	1892.7	1987.3	2043.5	2056.5
45°	160.8	196.9	621.8	1478.9	1649.3	1733.3	1853.4	1944.6	1997.4	2011.8
47.5°	144.0	176.7	532.5	1405.9	1570.6	1673.3	1796.2	1882.7	1931.2	1940.8
50°	134.4	163.3	472.9	1354.0	1514.9	1625.3	1750.1	1836.6	1877.4	1887.0
52.5°	126.8	151.7	417.2	1294.5	1457.3	1575.4	1694.4	1773.2	1810.2	1814.0
55°	115.2	136.8	343.3	1202.8	1366.0	1488.5	1603.7	1666.1	1692.5	1702.1
57.5°	109.0	125.8	285.2	1103.4	1263.3	1386.2	1490.9	1539.4	1560.5	1563.8
60°	103.2	120.0	254.5	1032.3	1198.0	1313.2	1404.4	1445.2	1464.5	1471.7
62.5°	97.5	116.2	231.4	959.3	1121.1	1232.5	1312.2	1347.3	1362.7	1364.1
65°	91.2	110.4	204.1	847.5	1001.1	1104.3	1166.8	1195.6	1202.8	1207.6
67.5°	85.0	104.7	184.4	734.6	877.2	962.7	1008.8	1033.8	1035.2	1045.3
70°	79.2	100.8	172.9	657.8	785.0	866.7	905.1	924.3	921.9	924.3
72.5°	75.4	95.1	165.2	579.1	696.7	761.0	795.6	809.0	810.5	811.0
75°	67.2	84.0	153.6	458.5	552.2	607.4	633.8	631.4	638.6	641.0
77.5°	58.1	72.5	126.3	338.0	413.9	450.4	471.5	478.2	475.8	476.3
80°	50.4	64.8	103.2	259.3	321.7	350.5	369.7	374.5	372.1	374.5
82.5°	40.8	53.3	80.2	192.1	241.0	264.1	277.5	278.5	279.9	284.2
85°	24.0	31.2	48.0	105.6	134.4	146.4	156.0	158.4	160.8	160.8
87.5°	9.6	13.4	25.0	44.2	55.7	59.5	59.5	55.7	59.5	53.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)