

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-940-1D-UNV-STD-W-8

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-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

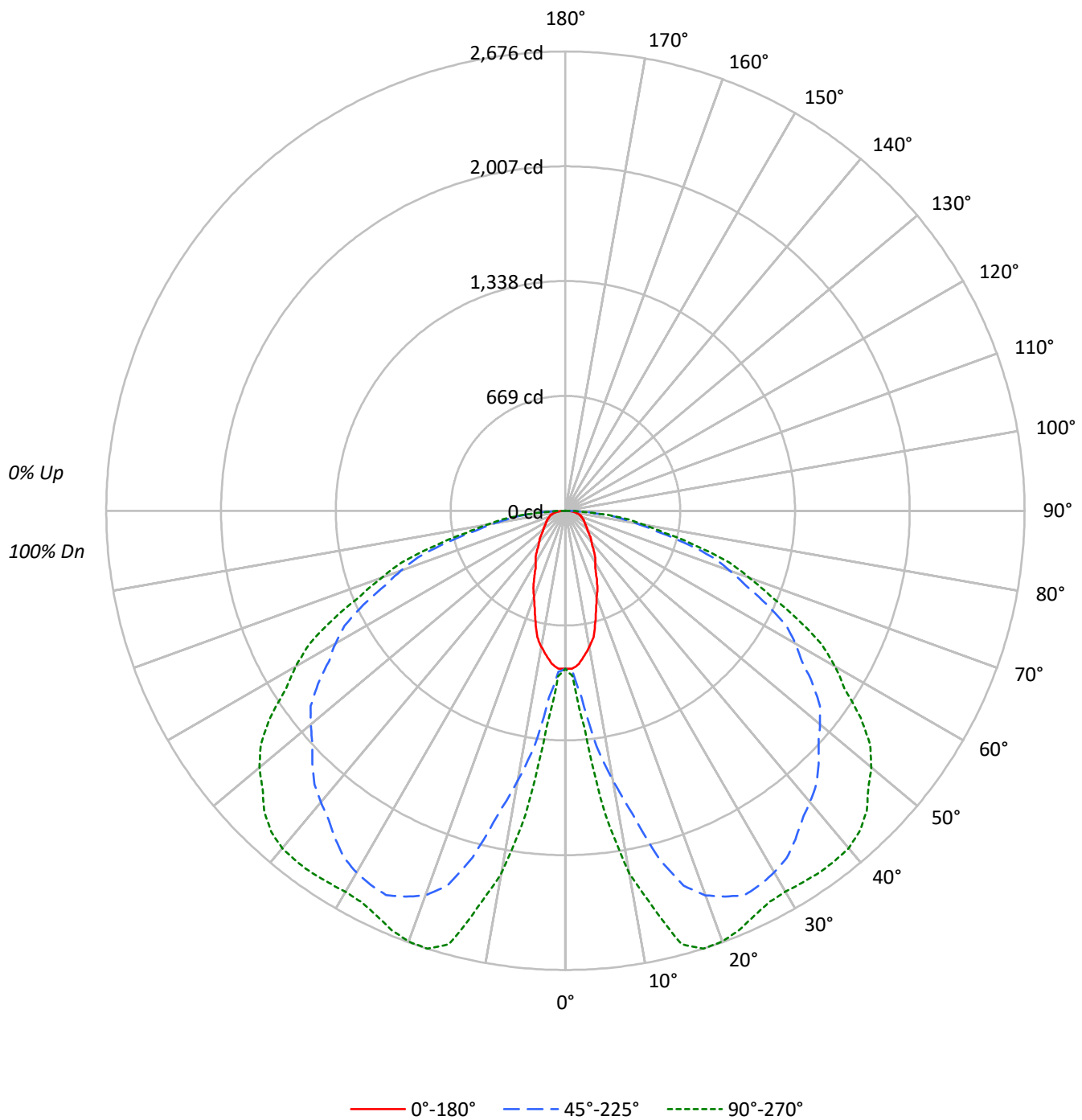
Lumens per Lamp: N/A
Luminaire Lumens: 7127.0 lumens
Efficiency: N/A
Efficacy: 78.2 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 91.1
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°	4248	4248	4248
5°	4155	5053	5882
10°	3773	7477	10043
15°	3210	9991	12487
20°	2617	11710	13112
25°	2186	12578	13249
30°	1846	12966	13660
35°	1634	13157	14508
40°	1427	13347	15460
45°	1294	13610	16189
50°	1190	13898	16704
55°	1143	14158	16886
60°	1174	14289	16747
65°	1228	14173	16259
70°	1318	13739	15377
75°	1478	12747	14091
80°	1652	11013	12271
85°	1567	9167	10501

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 16955 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	1.7
10°-20°	526.1	7.4
20°-30°	922.0	12.9
30°-40°	1187.1	16.7
40°-50°	1325.4	18.6
50°-60°	1271.0	17.8
60°-70°	1011.5	14.2
70°-80°	595.9	8.4
80°-90°	167.0	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°	1568.9	22.0
0°-40°	2756.0	38.7
0°-60°	5352.5	75.1
0°-90°	7127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7127.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	897	962	1091	1231	1270	82
15°	672	1235	2092	2530	2615	187
25°	429	1401	2471	2598	2603	198
35°	290	1314	2336	2478	2576	181
45°	198	1031	2086	2370	2482	154
55°	142	688	1760	2036	2100	130
65°	112	450	1298	1466	1490	111
75°	83	284	715	780	791	86
85°	30	77	173	195	198	33
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	920.9	920.9	920.9	920.9	920.9	920.9	920.9	920.9	920.9	920.9
2.5°	920.9	920.9	925.7	932.8	935.1	944.6	958.8	965.9	970.7	965.9
5°	897.2	909.1	947.6	1003.8	1060.1	1122.3	1202.2	1240.7	1264.4	1270.3
7.5°	850.5	883.0	992.6	1139.5	1302.9	1465.2	1605.6	1719.3	1785.6	1788.6
10°	805.4	861.7	1030.5	1255.5	1480.6	1711.6	1904.0	2022.5	2117.2	2143.9
12.5°	755.7	840.4	1070.8	1371.6	1679.6	1939.0	2152.8	2283.1	2358.9	2368.9
15°	672.2	796.6	1128.2	1554.6	1936.6	2247.5	2451.9	2555.5	2602.9	2614.7
17.5°	594.6	757.5	1178.6	1697.9	2150.4	2430.5	2585.7	2650.9	2674.5	2675.7
20°	533.0	719.6	1202.2	1797.4	2259.4	2511.1	2623.6	2665.1	2676.9	2671.0
22.5°	488.0	679.3	1216.5	1863.8	2325.7	2541.9	2626.0	2646.1	2650.9	2644.9
25°	429.4	613.0	1217.0	1951.4	2392.6	2549.6	2594.0	2599.9	2605.8	2602.9
27.5°	377.3	538.9	1199.3	2009.5	2402.1	2513.5	2534.2	2549.0	2567.3	2571.5
30°	346.5	491.6	1175.6	2028.4	2392.6	2475.5	2496.3	2522.9	2555.5	2564.4
32.5°	322.8	446.5	1140.1	2030.8	2368.9	2430.5	2458.4	2508.7	2555.5	2569.1
35°	290.2	379.0	1080.8	2013.6	2315.6	2357.1	2416.3	2499.2	2561.4	2576.2
37.5°	258.2	330.5	1000.3	1978.7	2245.8	2289.0	2386.7	2486.8	2556.1	2574.5
40°	236.9	302.0	938.7	1945.5	2191.3	2241.6	2363.0	2472.6	2546.6	2567.3
42.5°	220.3	278.4	872.4	1902.9	2129.7	2199.0	2334.6	2451.3	2520.6	2536.5
45°	198.4	242.8	766.9	1824.1	2034.3	2138.0	2286.0	2398.6	2463.7	2481.5
47.5°	177.7	217.9	656.8	1734.1	1937.2	2063.9	2215.6	2322.2	2382.0	2393.8
50°	165.8	201.4	583.4	1670.1	1868.5	2004.7	2158.7	2265.3	2315.6	2327.5
52.5°	156.4	187.1	514.7	1596.7	1797.4	1943.1	2090.0	2187.1	2232.7	2237.5
55°	142.1	168.8	423.4	1483.6	1684.9	1835.9	1978.1	2055.1	2087.6	2099.5
57.5°	134.4	155.2	351.8	1361.0	1558.2	1709.8	1838.9	1898.7	1924.8	1928.9
60°	127.3	148.1	313.9	1273.3	1477.6	1619.8	1732.3	1782.6	1806.3	1815.2
62.5°	120.2	143.3	285.5	1183.3	1382.9	1520.3	1618.6	1661.8	1680.8	1682.5
65°	112.5	136.2	251.7	1045.3	1234.8	1362.1	1439.1	1474.7	1483.6	1489.5
67.5°	104.8	129.1	227.4	906.1	1082.0	1187.4	1244.3	1275.1	1276.9	1289.3
70°	97.7	124.4	213.2	811.4	968.3	1069.0	1116.4	1140.1	1137.1	1140.1
72.5°	93.0	117.3	203.7	714.2	859.3	938.7	981.3	997.9	999.7	1000.3
75°	82.9	103.6	189.5	565.6	681.1	749.2	781.8	778.8	787.7	790.6
77.5°	71.7	89.4	155.8	416.9	510.5	555.5	581.6	589.9	586.9	587.5
80°	62.2	80.0	127.3	319.8	396.8	432.3	456.0	461.9	459.0	461.9
82.5°	50.3	65.7	98.9	236.9	297.3	325.7	342.3	343.5	345.3	350.6
85°	29.6	38.5	59.2	130.3	165.8	180.6	192.5	195.4	198.4	198.4
87.5°	11.8	16.6	30.8	54.5	68.7	73.4	73.4	68.7	73.4	66.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)