

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-840-1D-UNV-STD-W-12

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-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

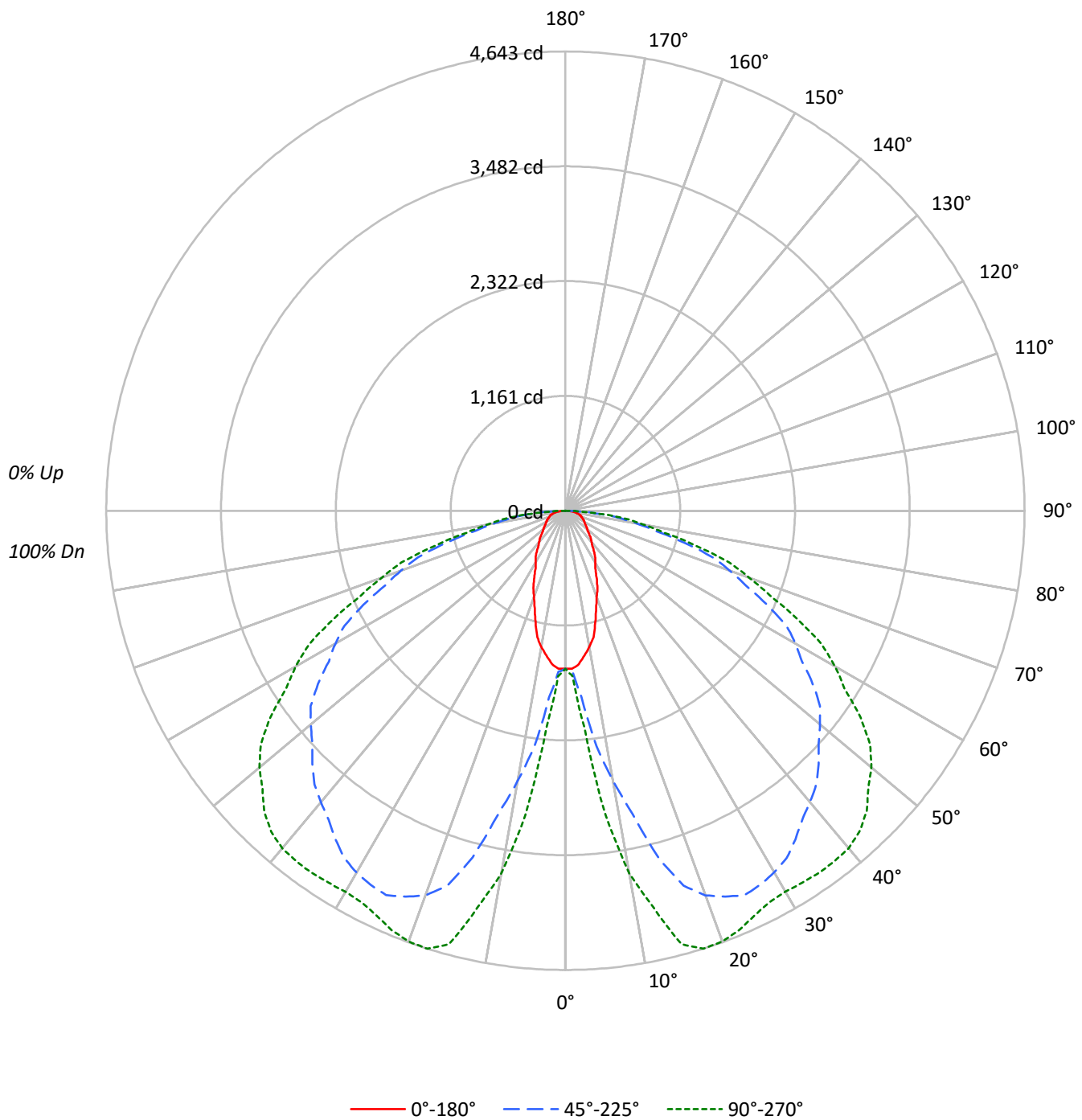
Lumens per Lamp: N/A
Luminaire Lumens: 12366.4 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 140.8
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°	4914	4914	4914
5°	4806	5845	6805
10°	4364	8648	11617
15°	3713	11558	14445
20°	3027	13545	15168
25°	2528	14550	15326
30°	2135	14998	15801
35°	1890	15220	16782
40°	1650	15440	17884
45°	1497	15744	18727
50°	1376	16077	19322
55°	1322	16378	19532
60°	1359	16528	19373
65°	1420	16395	18807
70°	1525	15893	17788
75°	1710	14744	16302
80°	1911	12740	14195
85°	1814	10605	12149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 19613 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.6	1.7
10°-20°	912.9	7.4
20°-30°	1599.7	12.9
30°-40°	2059.9	16.7
40°-50°	2299.8	18.6
50°-60°	2205.4	17.8
60°-70°	1755.1	14.2
70°-80°	1034.0	8.4
80°-90°	289.8	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°	2722.2	22.0
0°-40°	4782.1	38.7
0°-60°	9287.3	75.1
0°-90°	12366.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12366.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1598	1598	1598	1598	1598	
5°	1557	1669	1893	2136	2204	143
15°	1166	2143	3630	4389	4537	324
25°	745	2430	4288	4509	4516	344
35°	504	2280	4054	4301	4470	314
45°	344	1789	3620	4113	4306	267
55°	247	1195	3055	3532	3643	225
65°	195	781	2253	2543	2584	193
75°	144	492	1241	1353	1372	150
85°	51	134	301	338	344	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1597.9	1597.9	1597.9	1597.9	1597.9	1597.9	1597.9	1597.9	1597.9	1597.9
2.5°	1597.9	1597.9	1606.2	1618.5	1622.6	1639.0	1663.7	1676.0	1684.3	1676.0
5°	1556.8	1577.4	1644.2	1741.8	1839.4	1947.3	2086.1	2152.9	2194.0	2204.2
7.5°	1475.7	1532.2	1722.3	1977.1	2260.8	2542.3	2785.9	2983.2	3098.3	3103.4
10°	1397.6	1495.2	1788.1	2178.5	2569.0	2969.8	3303.8	3509.3	3673.7	3720.0
12.5°	1311.2	1458.2	1857.9	2380.0	2914.3	3364.4	3735.4	3961.5	4093.0	4110.5
15°	1166.3	1382.1	1957.6	2697.5	3360.3	3899.8	4254.3	4434.2	4516.4	4536.9
17.5°	1031.7	1314.3	2045.0	2946.2	3731.3	4217.3	4486.6	4599.6	4640.7	4642.8
20°	924.9	1248.6	2086.1	3118.8	3920.4	4357.1	4552.3	4624.3	4644.8	4634.6
22.5°	846.8	1178.7	2110.7	3233.9	4035.5	4410.5	4556.5	4591.4	4599.6	4589.3
25°	745.0	1063.6	2111.8	3386.0	4151.6	4423.9	4501.0	4511.2	4521.5	4516.4
27.5°	654.6	935.1	2080.9	3486.7	4168.0	4361.2	4397.2	4422.9	4454.7	4461.9
30°	601.2	852.9	2039.8	3519.6	4151.6	4295.4	4331.4	4377.6	4434.2	4449.6
32.5°	560.1	774.8	1978.2	3523.7	4110.5	4217.3	4265.6	4353.0	4434.2	4457.8
35°	503.5	657.7	1875.4	3493.9	4018.0	4089.9	4192.7	4336.5	4444.4	4470.1
37.5°	448.0	573.4	1735.6	3433.3	3896.7	3971.7	4141.3	4315.0	4435.2	4467.1
40°	411.0	524.1	1628.8	3375.7	3802.2	3889.5	4100.2	4290.3	4418.8	4454.7
42.5°	382.3	483.0	1513.7	3301.7	3695.3	3815.5	4050.9	4253.3	4373.5	4401.3
45°	344.3	421.3	1330.8	3165.1	3529.9	3709.7	3966.6	4161.8	4274.9	4305.7
47.5°	308.3	378.2	1139.6	3008.9	3361.3	3581.2	3844.3	4029.3	4133.1	4153.6
50°	287.7	349.4	1012.2	2897.9	3242.1	3478.5	3745.7	3930.6	4018.0	4038.5
52.5°	271.3	324.7	893.0	2770.5	3118.8	3371.6	3626.5	3795.0	3874.1	3882.3
55°	246.6	292.9	734.7	2574.2	2923.6	3185.6	3432.2	3565.8	3622.3	3642.9
57.5°	233.3	269.2	610.4	2361.5	2703.7	2966.7	3190.8	3294.5	3339.8	3346.9
60°	220.9	256.9	544.6	2209.4	2563.9	2810.5	3005.8	3093.1	3134.2	3149.6
62.5°	208.6	248.7	495.3	2053.2	2399.5	2637.9	2808.5	2883.5	2916.4	2919.5
65°	195.2	236.4	436.7	1813.7	2142.6	2363.5	2497.1	2558.8	2574.2	2584.5
67.5°	181.9	224.0	394.6	1572.3	1877.5	2060.4	2159.0	2212.5	2215.5	2237.1
70°	169.6	215.8	369.9	1407.8	1680.2	1854.8	1937.1	1978.2	1973.0	1978.2
72.5°	161.3	203.5	353.5	1239.3	1491.1	1628.8	1702.8	1731.5	1734.6	1735.6
75°	143.9	179.8	328.8	981.4	1181.8	1299.9	1356.5	1351.3	1366.7	1371.9
77.5°	124.3	155.2	270.3	723.4	885.8	963.9	1009.1	1023.5	1018.4	1019.4
80°	107.9	138.7	220.9	554.9	688.5	750.2	791.3	801.5	796.4	801.5
82.5°	87.3	114.1	171.6	411.0	515.9	565.2	594.0	596.0	599.1	608.3
85°	51.4	66.8	102.8	226.1	287.7	313.4	334.0	339.1	344.3	344.3
87.5°	20.6	28.8	53.4	94.5	119.2	127.4	127.4	119.2	127.4	115.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)