

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-935-1D-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-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

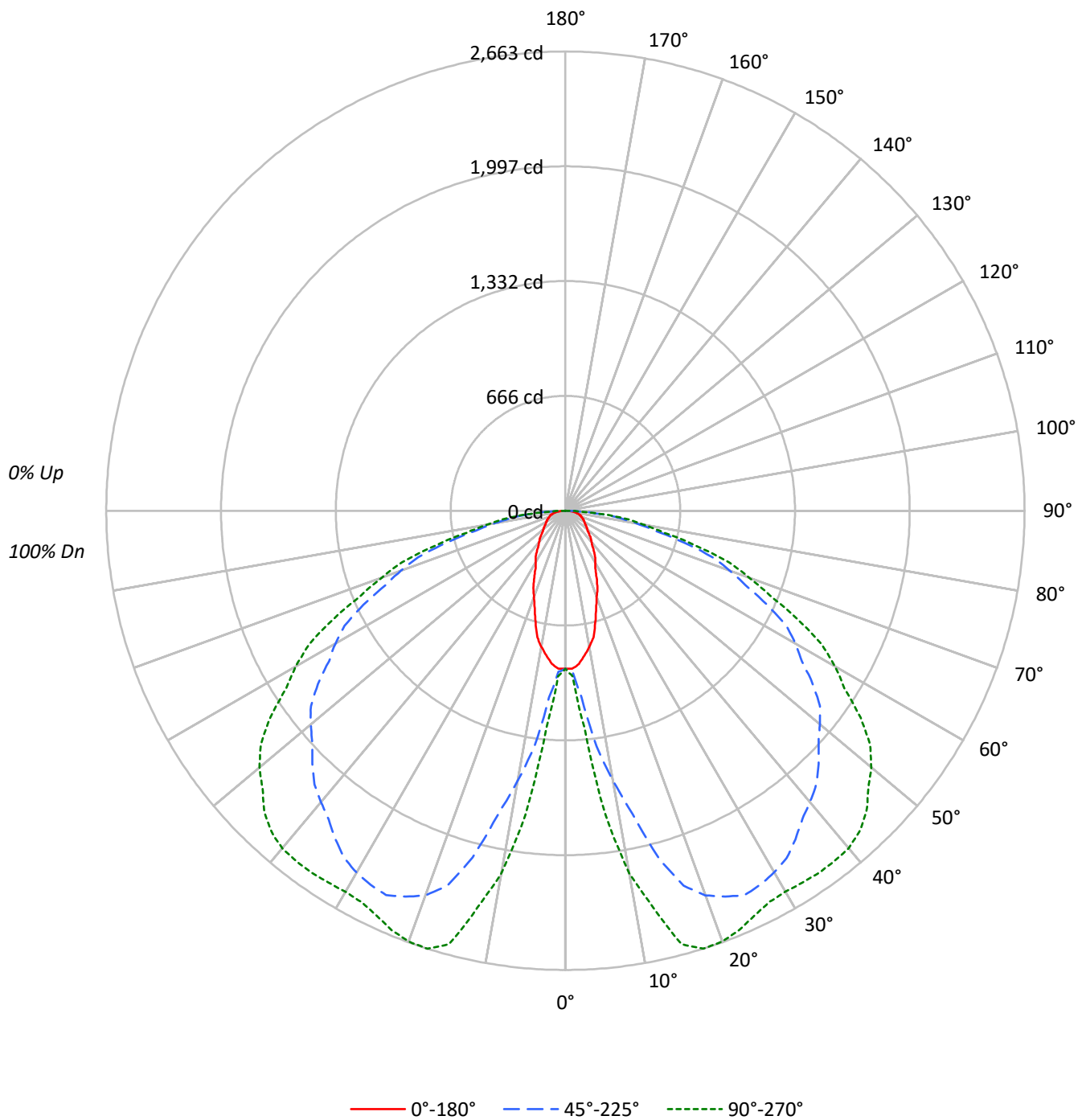
Lumens per Lamp: N/A
Luminaire Lumens: 7092.0 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

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°	4227	4227	4227
5°	4134	5028	5854
10°	3754	7440	9993
15°	3195	9942	12426
20°	2604	11652	13048
25°	2175	12516	13184
30°	1837	12902	13593
35°	1626	13093	14437
40°	1419	13282	15384
45°	1288	13543	16109
50°	1184	13830	16622
55°	1137	14089	16803
60°	1169	14219	16665
65°	1223	14104	16179
70°	1311	13672	15302
75°	1470	12683	14024
80°	1644	10960	12212
85°	1561	9122	10448

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 16872 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	1.7
10°-20°	523.5	7.4
20°-30°	917.4	12.9
30°-40°	1181.3	16.7
40°-50°	1318.9	18.6
50°-60°	1264.8	17.8
60°-70°	1006.6	14.2
70°-80°	593.0	8.4
80°-90°	166.2	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°	1561.2	22.0
0°-40°	2742.5	38.7
0°-60°	5326.2	75.1
0°-90°	7092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	916	916	916	916	916	
5°	893	957	1086	1225	1264	82
15°	669	1229	2082	2517	2602	186
25°	427	1394	2459	2586	2590	197
35°	289	1308	2325	2466	2564	180
45°	197	1026	2076	2359	2469	153
55°	141	685	1752	2026	2089	129
65°	112	448	1292	1459	1482	111
75°	82	282	712	776	787	86
85°	30	77	172	194	197	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°	916.4	916.4	916.4	916.4	916.4	916.4	916.4	916.4	916.4	916.4
2.5°	916.4	916.4	921.1	928.2	930.6	940.0	954.1	961.2	965.9	961.2
5°	892.8	904.6	942.9	998.9	1054.9	1116.8	1196.3	1234.6	1258.2	1264.1
7.5°	846.3	878.7	987.7	1133.9	1296.5	1458.0	1597.7	1710.8	1776.8	1779.8
10°	801.5	857.5	1025.4	1249.4	1473.3	1703.2	1894.7	2012.6	2106.9	2133.4
12.5°	752.0	836.3	1065.5	1364.9	1671.3	1929.5	2142.2	2271.9	2347.3	2357.3
15°	668.9	792.6	1122.7	1547.0	1927.1	2236.5	2439.8	2543.0	2590.1	2601.9
17.5°	591.7	753.8	1172.8	1689.6	2139.9	2418.6	2573.0	2637.8	2661.4	2662.6
20°	530.4	716.0	1196.3	1788.6	2248.3	2498.8	2610.7	2652.0	2663.8	2657.9
22.5°	485.6	676.0	1210.5	1854.6	2314.3	2529.4	2613.1	2633.1	2637.8	2631.9
25°	427.3	610.0	1211.1	1941.8	2380.9	2537.1	2581.3	2587.2	2593.0	2590.1
27.5°	375.4	536.3	1193.4	1999.6	2390.3	2501.1	2521.7	2536.5	2554.7	2558.9
30°	344.8	489.1	1169.8	2018.5	2380.9	2463.4	2484.0	2510.5	2543.0	2551.8
32.5°	321.2	444.4	1134.5	2020.8	2357.3	2418.6	2446.3	2496.4	2543.0	2556.5
35°	288.8	377.2	1075.5	2003.7	2304.3	2345.5	2404.5	2487.0	2548.8	2563.6
37.5°	256.9	328.8	995.4	1968.9	2234.7	2277.8	2375.0	2474.6	2543.5	2561.8
40°	235.7	300.6	934.1	1935.9	2180.5	2230.6	2351.4	2460.4	2534.1	2554.7
42.5°	219.2	277.0	868.1	1893.5	2119.2	2188.2	2323.1	2439.2	2508.2	2524.1
45°	197.4	241.6	763.2	1815.1	2024.3	2127.5	2274.8	2386.8	2451.6	2469.3
47.5°	176.8	216.9	653.6	1725.6	1927.7	2053.8	2204.7	2310.8	2370.3	2382.1
50°	165.0	200.4	580.5	1661.9	1859.3	1994.9	2148.1	2254.2	2304.3	2316.1
52.5°	155.6	186.2	512.1	1588.8	1788.6	1933.6	2079.7	2176.4	2221.8	2226.5
55°	141.4	168.0	421.4	1476.3	1676.6	1826.9	1968.4	2045.0	2077.4	2089.2
57.5°	133.8	154.4	350.1	1354.3	1550.5	1701.4	1829.9	1889.4	1915.3	1919.4
60°	126.7	147.3	312.3	1267.1	1470.4	1611.8	1723.8	1773.9	1797.5	1806.3
62.5°	119.6	142.6	284.1	1177.5	1376.1	1512.8	1610.6	1653.7	1672.5	1674.3
65°	112.0	135.5	250.5	1040.2	1228.8	1355.5	1432.1	1467.4	1476.3	1482.2
67.5°	104.3	128.5	226.3	901.7	1076.7	1181.6	1238.2	1268.8	1270.6	1283.0
70°	97.2	123.8	212.2	807.4	963.6	1063.7	1110.9	1134.5	1131.5	1134.5
72.5°	92.5	116.7	202.7	710.7	855.1	934.1	976.5	993.0	994.8	995.4
75°	82.5	103.1	188.6	562.8	677.7	745.5	777.9	775.0	783.8	786.8
77.5°	71.3	89.0	155.0	414.9	508.0	552.8	578.7	587.0	584.0	584.6
80°	61.9	79.6	126.7	318.2	394.9	430.2	453.8	459.7	456.7	459.7
82.5°	50.1	65.4	98.4	235.7	295.8	324.1	340.6	341.8	343.6	348.9
85°	29.5	38.3	58.9	129.7	165.0	179.7	191.5	194.5	197.4	197.4
87.5°	11.8	16.5	30.6	54.2	68.4	73.1	73.1	68.4	73.1	66.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)