

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-100D-935-1D-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-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

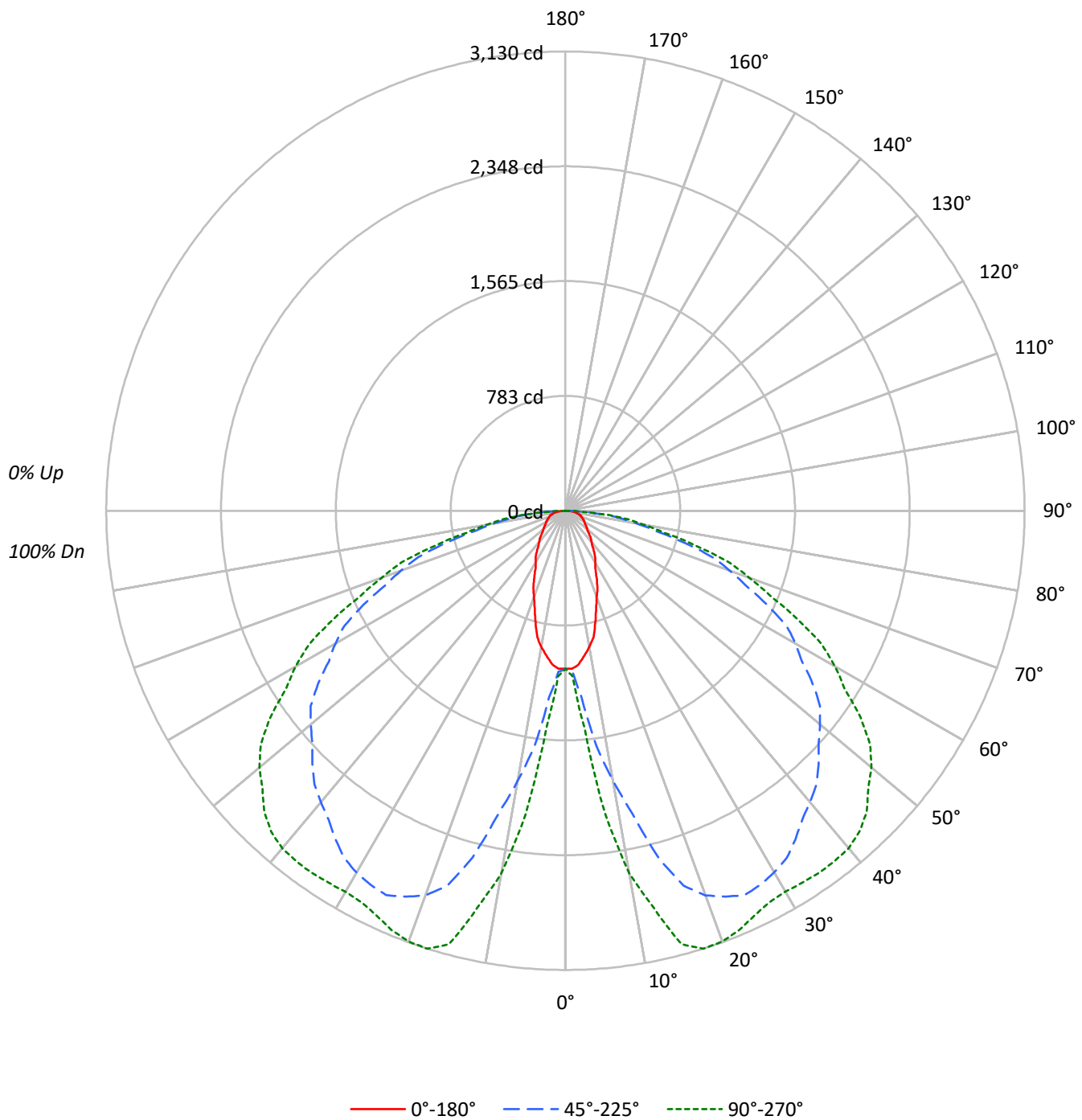
Lumens per Lamp: N/A
Luminaire Lumens: 8336.7 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 108.2
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°	3313	3313	3313
5°	3240	3940	4588
10°	2942	5830	7831
15°	2503	7791	9738
20°	2041	9131	10225
25°	1704	9808	10332
30°	1439	10111	10652
35°	1275	10261	11314
40°	1112	10409	12056
45°	1009	10613	12625
50°	928	10839	13026
55°	892	11041	13168
60°	916	11142	13060
65°	958	11053	12679
70°	1028	10714	11992
75°	1153	9940	10989
80°	1288	8588	9571
85°	1221	7151	8190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13222 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.3	1.7
10°-20°	615.4	7.4
20°-30°	1078.4	12.9
30°-40°	1388.7	16.7
40°-50°	1550.4	18.6
50°-60°	1486.8	17.8
60°-70°	1183.2	14.2
70°-80°	697.1	8.4
80°-90°	195.4	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°	1835.2	22.0
0°-40°	3223.8	38.7
0°-60°	6261.0	75.1
0°-90°	8336.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8336.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1077	1077	1077	1077	1077	
5°	1050	1125	1276	1440	1486	96
15°	786	1444	2447	2959	3058	218
25°	502	1638	2890	3039	3045	232
35°	340	1537	2733	2899	3014	212
45°	232	1206	2440	2773	2903	180
55°	166	805	2059	2381	2456	152
65°	132	526	1519	1715	1742	130
75°	97	332	836	912	925	101
85°	35	90	203	228	232	39
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1077.2	1077.2	1077.2	1077.2	1077.2	1077.2	1077.2	1077.2	1077.2	1077.2
2.5°	1077.2	1077.2	1082.8	1091.1	1093.9	1105.0	1121.6	1129.9	1135.4	1129.9
5°	1049.5	1063.4	1108.4	1174.2	1240.0	1312.8	1406.3	1451.3	1479.0	1486.0
7.5°	994.8	1032.9	1161.1	1332.9	1524.1	1713.9	1878.1	2011.1	2088.7	2092.1
10°	942.2	1008.0	1205.4	1468.7	1731.9	2002.1	2227.2	2365.8	2476.6	2507.8
12.5°	884.0	983.0	1252.5	1604.4	1964.7	2268.1	2518.2	2670.6	2759.3	2771.0
15°	786.3	931.8	1319.7	1818.5	2265.3	2629.0	2868.0	2989.3	3044.7	3058.5
17.5°	695.5	886.0	1378.6	1986.1	2515.4	2843.1	3024.6	3100.8	3128.5	3129.9
20°	623.5	841.7	1406.3	2102.5	2642.9	2937.3	3068.9	3117.4	3131.3	3124.3
22.5°	570.8	794.6	1422.9	2180.1	2720.5	2973.3	3071.7	3095.2	3100.8	3093.9
25°	502.3	717.0	1423.6	2282.6	2798.7	2982.3	3034.3	3041.2	3048.1	3044.7
27.5°	441.3	630.4	1402.8	2350.5	2809.8	2940.1	2964.3	2981.6	3003.1	3008.0
30°	405.3	575.0	1375.1	2372.7	2798.7	2895.7	2920.0	2951.2	2989.3	2999.6
32.5°	377.6	522.3	1333.6	2375.5	2771.0	2843.1	2875.6	2934.5	2989.3	3005.2
35°	339.5	443.4	1264.3	2355.4	2708.7	2757.2	2826.5	2923.4	2996.2	3013.5
37.5°	302.0	386.6	1170.1	2314.5	2626.9	2677.5	2791.8	2908.9	2990.0	3011.4
40°	277.1	353.3	1098.0	2275.7	2563.2	2622.1	2764.1	2892.3	2978.9	3003.1
42.5°	257.7	325.6	1020.4	2225.8	2491.2	2572.2	2730.9	2867.3	2948.4	2967.1
45°	232.1	284.0	897.1	2133.7	2379.6	2500.9	2674.1	2805.7	2881.9	2902.7
47.5°	207.8	254.9	768.3	2028.4	2266.0	2414.3	2591.6	2716.3	2786.3	2800.1
50°	194.0	235.5	682.4	1953.6	2185.7	2345.0	2525.1	2649.8	2708.7	2722.5
52.5°	182.9	218.9	602.0	1867.7	2102.5	2272.9	2444.7	2558.4	2611.7	2617.2
55°	166.3	197.4	495.3	1735.4	1970.9	2147.6	2313.8	2403.9	2442.0	2455.8
57.5°	157.3	181.5	411.5	1592.0	1822.7	2000.0	2151.0	2221.0	2251.5	2256.3
60°	148.9	173.2	367.2	1489.4	1728.4	1894.7	2026.3	2085.2	2112.9	2123.3
62.5°	140.6	167.6	333.9	1384.1	1617.6	1778.3	1893.3	1943.9	1966.1	1968.1
65°	131.6	159.3	294.4	1222.7	1444.4	1593.3	1683.4	1725.0	1735.4	1742.3
67.5°	122.6	151.0	266.0	1059.9	1265.7	1389.0	1455.5	1491.5	1493.6	1508.1
70°	114.3	145.5	249.4	949.1	1132.7	1250.4	1305.9	1333.6	1330.1	1333.6
72.5°	108.8	137.2	238.3	835.5	1005.2	1098.0	1147.9	1167.3	1169.4	1170.1
75°	97.0	121.2	221.7	661.6	796.7	876.3	914.4	911.0	921.4	924.8
77.5°	83.8	104.6	182.2	487.7	597.2	649.8	680.3	690.0	686.5	687.2
80°	72.7	93.5	148.9	374.1	464.1	505.7	533.4	540.4	536.9	540.4
82.5°	58.9	76.9	115.7	277.1	347.8	381.0	400.4	401.8	403.9	410.1
85°	34.6	45.0	69.3	152.4	194.0	211.3	225.1	228.6	232.1	232.1
87.5°	13.9	19.4	36.0	63.7	80.4	85.9	85.9	80.4	85.9	77.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)