

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-830-1D-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-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

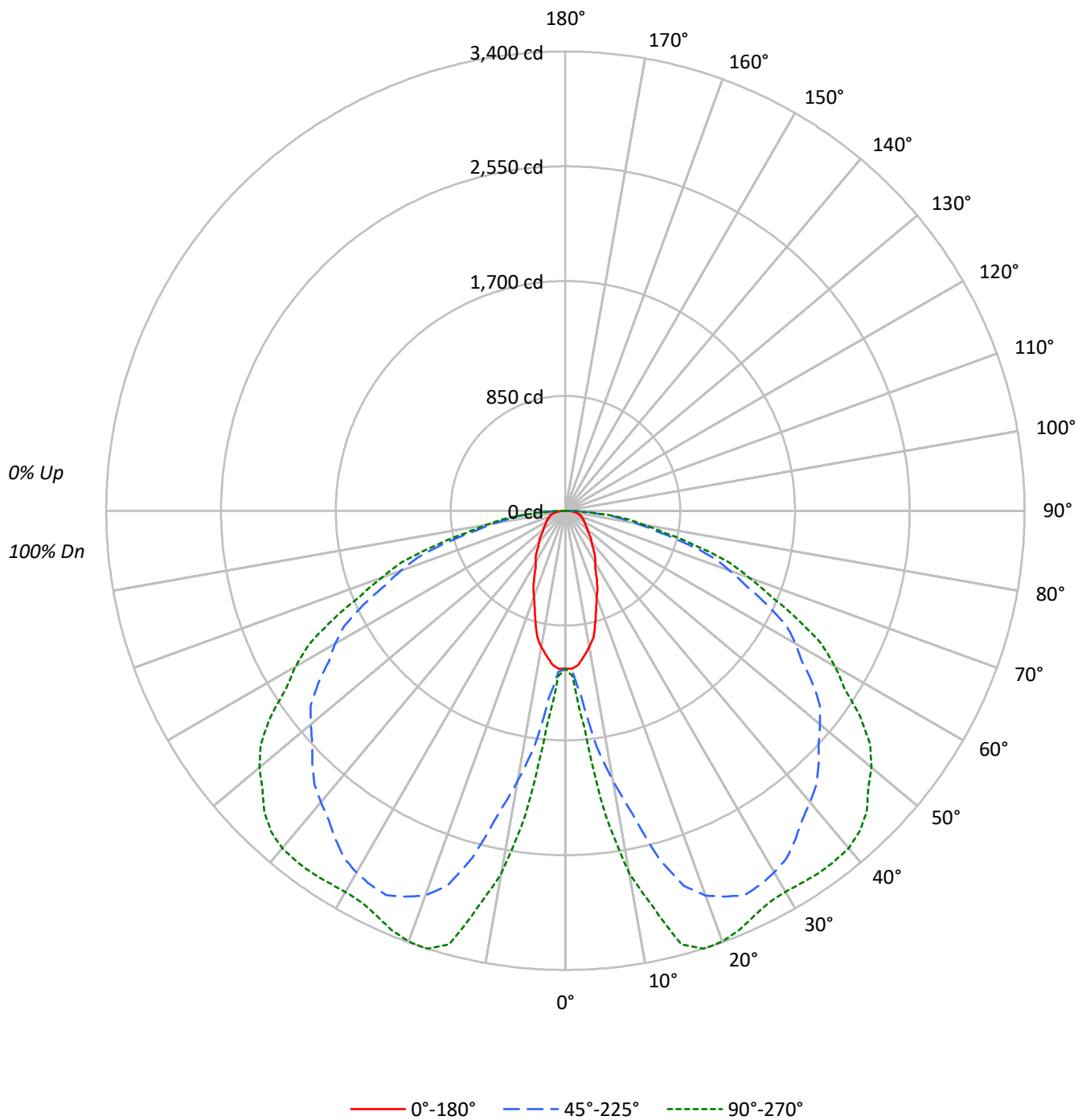
Lumens per Lamp: N/A
Luminaire Lumens: 9056.3 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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°	3599	3599	3599
5°	3520	4281	4983
10°	3196	6334	8508
15°	2720	8464	10578
20°	2217	9919	11108
25°	1851	10655	11223
30°	1563	10984	11572
35°	1385	11146	12290
40°	1208	11307	13097
45°	1096	11529	13714
50°	1008	11774	14150
55°	968	11994	14304
60°	995	12104	14187
65°	1041	12007	13773
70°	1117	11639	13027
75°	1252	10798	11938
80°	1399	9330	10396
85°	1327	7767	8896

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 14364 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.5	1.7
10°-20°	668.5	7.4
20°-30°	1171.5	12.9
30°-40°	1508.5	16.7
40°-50°	1684.2	18.6
50°-60°	1615.1	17.8
60°-70°	1285.4	14.2
70°-80°	757.3	8.4
80°-90°	212.3	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°	1993.6	22.0
0°-40°	3502.1	38.7
0°-60°	6801.4	75.1
0°-90°	9056.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9056.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1140	1222	1387	1564	1614	105
15°	854	1569	2658	3214	3322	237
25°	546	1780	3140	3302	3308	252
35°	369	1670	2969	3149	3274	230
45°	252	1310	2651	3012	3153	195
55°	181	875	2237	2587	2668	165
65°	143	572	1650	1863	1893	142
75°	105	360	909	991	1005	110
85°	38	98	220	247	252	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1170.2	1170.2	1170.2	1170.2	1170.2	1170.2	1170.2	1170.2	1170.2	1170.2
2.5°	1170.2	1170.2	1176.2	1185.3	1188.3	1200.3	1218.4	1227.4	1233.4	1227.4
5°	1140.1	1155.2	1204.1	1275.6	1347.1	1426.1	1527.7	1576.6	1606.7	1614.2
7.5°	1080.7	1122.1	1261.3	1447.9	1655.6	1861.8	2040.2	2184.7	2269.0	2272.7
10°	1023.5	1095.0	1309.4	1595.4	1881.4	2174.9	2419.5	2570.0	2690.4	2724.3
12.5°	960.3	1067.9	1360.6	1742.9	2134.2	2463.9	2735.5	2901.1	2997.4	3010.2
15°	854.2	1012.2	1433.6	1975.5	2460.9	2855.9	3115.6	3247.3	3307.5	3322.5
17.5°	755.6	962.5	1497.6	2157.6	2732.5	3088.5	3285.7	3368.4	3398.5	3400.0
20°	677.3	914.4	1527.7	2284.0	2871.0	3190.8	3333.8	3386.5	3401.6	3394.0
22.5°	620.1	863.2	1545.7	2368.3	2955.3	3230.0	3336.8	3362.4	3368.4	3360.9
25°	545.6	778.9	1546.5	2479.7	3040.3	3239.8	3296.2	3303.7	3311.2	3307.5
27.5°	479.4	684.8	1523.9	2553.4	3052.4	3193.8	3220.2	3239.0	3262.3	3267.6
30°	440.2	624.6	1493.8	2577.5	3040.3	3145.7	3172.0	3205.9	3247.3	3258.6
32.5°	410.1	567.4	1448.7	2580.5	3010.2	3088.5	3123.9	3187.8	3247.3	3264.6
35°	368.8	481.6	1373.4	2558.7	2942.5	2995.2	3070.4	3175.8	3254.8	3273.6
37.5°	328.1	419.9	1271.1	2514.3	2853.7	2908.6	3032.8	3160.0	3248.0	3271.4
40°	301.0	383.8	1192.8	2472.1	2784.5	2848.4	3002.7	3141.9	3236.0	3262.3
42.5°	280.0	353.7	1108.5	2418.0	2706.2	2794.2	2966.6	3114.8	3202.9	3223.2
45°	252.1	308.5	974.6	2317.9	2585.0	2716.7	2904.9	3047.9	3130.6	3153.2
47.5°	225.8	276.9	834.6	2203.5	2461.6	2622.7	2815.3	2950.8	3026.8	3041.8
50°	210.7	255.9	741.3	2122.2	2374.3	2547.4	2743.1	2878.5	2942.5	2957.5
52.5°	198.7	237.8	654.0	2028.9	2284.0	2469.1	2655.8	2779.2	2837.1	2843.2
55°	180.6	214.5	538.1	1885.2	2141.0	2332.9	2513.5	2611.4	2652.8	2667.8
57.5°	170.8	197.2	447.0	1729.4	1980.0	2172.6	2336.7	2412.7	2445.8	2451.1
60°	161.8	188.1	398.9	1618.0	1877.6	2058.2	2201.2	2265.2	2295.3	2306.6
62.5°	152.8	182.1	362.7	1503.6	1757.2	1931.8	2056.7	2111.7	2135.8	2138.0
65°	143.0	173.1	319.8	1328.3	1569.1	1730.9	1828.7	1873.9	1885.2	1892.7
67.5°	133.2	164.1	289.0	1151.4	1374.9	1508.9	1581.1	1620.3	1622.5	1638.3
70°	124.2	158.0	270.9	1031.0	1230.4	1358.4	1418.6	1448.7	1444.9	1448.7
72.5°	118.2	149.0	258.9	907.6	1092.0	1192.8	1247.0	1268.1	1270.3	1271.1
75°	105.4	131.7	240.8	718.7	865.4	952.0	993.4	989.6	1000.9	1004.7
77.5°	91.1	113.6	197.9	529.8	648.7	705.9	739.0	749.5	745.8	746.5
80°	79.0	101.6	161.8	406.4	504.2	549.4	579.5	587.0	583.2	587.0
82.5°	64.0	83.5	125.7	301.0	377.8	413.9	435.0	436.5	438.7	445.5
85°	37.6	48.9	75.3	165.6	210.7	229.5	244.6	248.3	252.1	252.1
87.5°	15.1	21.1	39.1	69.2	87.3	93.3	93.3	87.3	93.3	84.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)