

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-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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

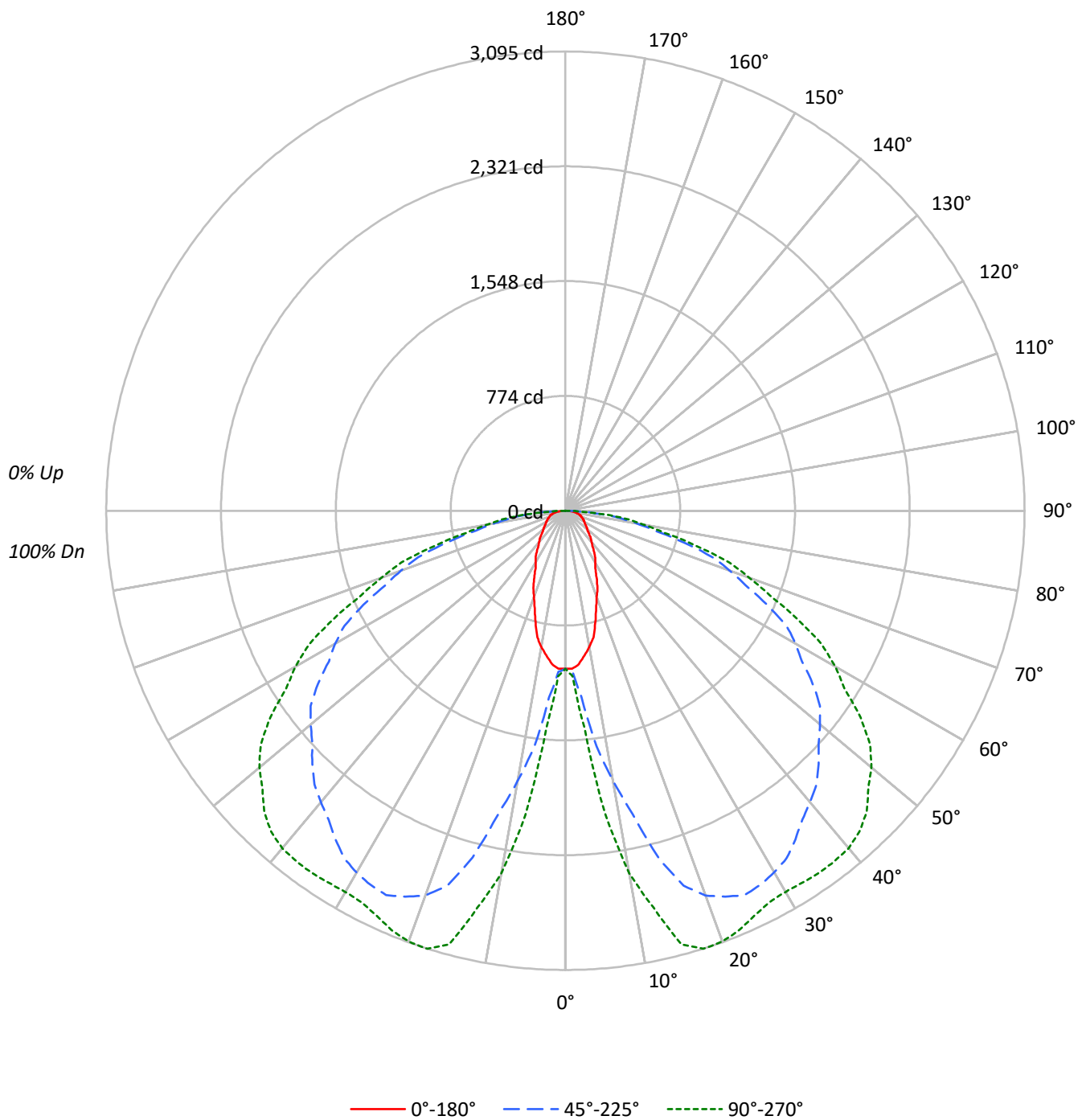
Lumens per Lamp: N/A
Luminaire Lumens: 8244.2 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

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°	4914	4914	4914
5°	4806	5845	6805
10°	4364	8649	11617
15°	3714	11558	14445
20°	3027	13545	15168
25°	2528	14550	15325
30°	2135	14998	15801
35°	1891	15220	16783
40°	1650	15440	17884
45°	1497	15743	18727
50°	1376	16077	19323
55°	1322	16378	19532
60°	1359	16529	19373
65°	1421	16396	18807
70°	1524	15893	17788
75°	1709	14744	16302
80°	1910	12740	14197
85°	1815	10604	12147

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°	139.7	1.7
10°-20°	608.6	7.4
20°-30°	1066.5	12.9
30°-40°	1373.3	16.7
40°-50°	1533.2	18.6
50°-60°	1470.3	17.8
60°-70°	1170.1	14.2
70°-80°	689.3	8.4
80°-90°	193.2	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°	1814.8	22.0
0°-40°	3188.1	38.7
0°-60°	6191.6	75.1
0°-90°	8244.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8244.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1065	1065	1065	1065	1065	
5°	1038	1112	1262	1424	1470	95
15°	778	1428	2420	2926	3025	216
25°	497	1620	2858	3006	3011	229
35°	336	1520	2703	2867	2980	210
45°	230	1193	2413	2742	2870	178
55°	164	796	2036	2355	2429	150
65°	130	521	1502	1696	1723	129
75°	96	328	827	902	915	100
85°	34	89	200	225	230	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°	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3
2.5°	1065.3	1065.3	1070.8	1079.0	1081.7	1092.7	1109.1	1117.4	1122.8	1117.4
5°	1037.9	1051.6	1096.1	1161.2	1226.3	1298.2	1390.7	1435.2	1462.6	1469.5
7.5°	983.8	1021.5	1148.2	1318.1	1507.2	1694.9	1857.2	1988.8	2065.5	2068.9
10°	931.7	996.8	1192.0	1452.4	1712.7	1979.9	2202.5	2339.5	2449.2	2480.0
12.5°	874.2	972.1	1238.6	1586.6	1942.9	2242.9	2490.3	2641.0	2728.7	2740.3
15°	777.6	921.4	1305.1	1798.3	2240.2	2599.9	2836.2	2956.1	3010.9	3024.6
17.5°	687.8	876.2	1363.3	1964.1	2487.5	2811.6	2991.1	3066.4	3093.8	3095.2
20°	616.6	832.4	1390.7	2079.2	2613.6	2904.7	3034.9	3082.9	3096.6	3089.7
22.5°	564.5	785.8	1407.2	2155.9	2690.3	2940.4	3037.6	3060.9	3066.4	3059.6
25°	496.7	709.1	1407.8	2257.3	2767.7	2949.3	3000.6	3007.5	3014.3	3010.9
27.5°	436.4	623.4	1387.3	2324.5	2778.7	2907.5	2931.4	2948.6	2969.8	2974.6
30°	400.8	568.6	1359.9	2346.4	2767.7	2863.6	2887.6	2918.4	2956.1	2966.4
32.5°	373.4	516.5	1318.8	2349.1	2740.3	2811.6	2843.8	2902.0	2956.1	2971.9
35°	335.7	438.4	1250.3	2329.3	2678.7	2726.6	2795.1	2891.0	2963.0	2980.1
37.5°	298.7	382.3	1157.1	2288.8	2597.8	2647.8	2760.9	2876.6	2956.8	2978.0
40°	274.0	349.4	1085.8	2250.5	2534.8	2593.0	2733.5	2860.2	2945.8	2969.8
42.5°	254.8	322.0	1009.1	2201.2	2463.5	2543.7	2700.6	2835.5	2915.7	2934.2
45°	229.5	280.9	887.2	2110.0	2353.2	2473.1	2644.4	2774.6	2849.9	2870.5
47.5°	205.5	252.1	759.8	2005.9	2240.9	2387.5	2562.9	2686.2	2755.4	2769.1
50°	191.8	232.9	674.8	1931.9	2161.4	2319.0	2497.1	2620.4	2678.7	2692.4
52.5°	180.9	216.5	595.3	1847.0	2079.2	2247.7	2417.6	2530.0	2582.7	2588.2
55°	164.4	195.2	489.8	1716.1	1949.0	2123.7	2288.2	2377.2	2414.9	2428.6
57.5°	155.5	179.5	406.9	1574.3	1802.4	1977.8	2127.2	2196.4	2226.5	2231.3
60°	147.3	171.3	363.1	1472.9	1709.3	1873.7	2003.9	2062.1	2089.5	2099.8
62.5°	139.1	165.8	330.2	1368.8	1599.7	1758.6	1872.3	1922.3	1944.3	1946.3
65°	130.2	157.6	291.2	1209.2	1428.4	1575.7	1664.7	1705.8	1716.1	1723.0
67.5°	121.3	149.3	263.1	1048.2	1251.6	1373.6	1439.3	1475.0	1477.0	1491.4
70°	113.0	143.9	246.6	938.6	1120.1	1236.6	1291.4	1318.8	1315.3	1318.8
72.5°	107.6	135.6	235.7	826.2	994.0	1085.8	1135.2	1154.4	1156.4	1157.1
75°	95.9	119.9	219.2	654.2	787.8	866.6	904.3	900.9	911.2	914.6
77.5°	82.9	103.4	180.2	482.3	590.5	642.6	672.7	682.3	678.9	679.6
80°	71.9	92.5	147.3	369.9	459.0	500.1	527.5	534.4	530.9	534.4
82.5°	58.2	76.0	114.4	274.0	343.9	376.8	396.0	397.3	399.4	405.6
85°	34.3	44.5	68.5	150.7	191.8	208.9	222.7	226.1	229.5	229.5
87.5°	13.7	19.2	35.6	63.0	79.5	84.9	84.9	79.5	84.9	76.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)