

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-835-1D-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-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

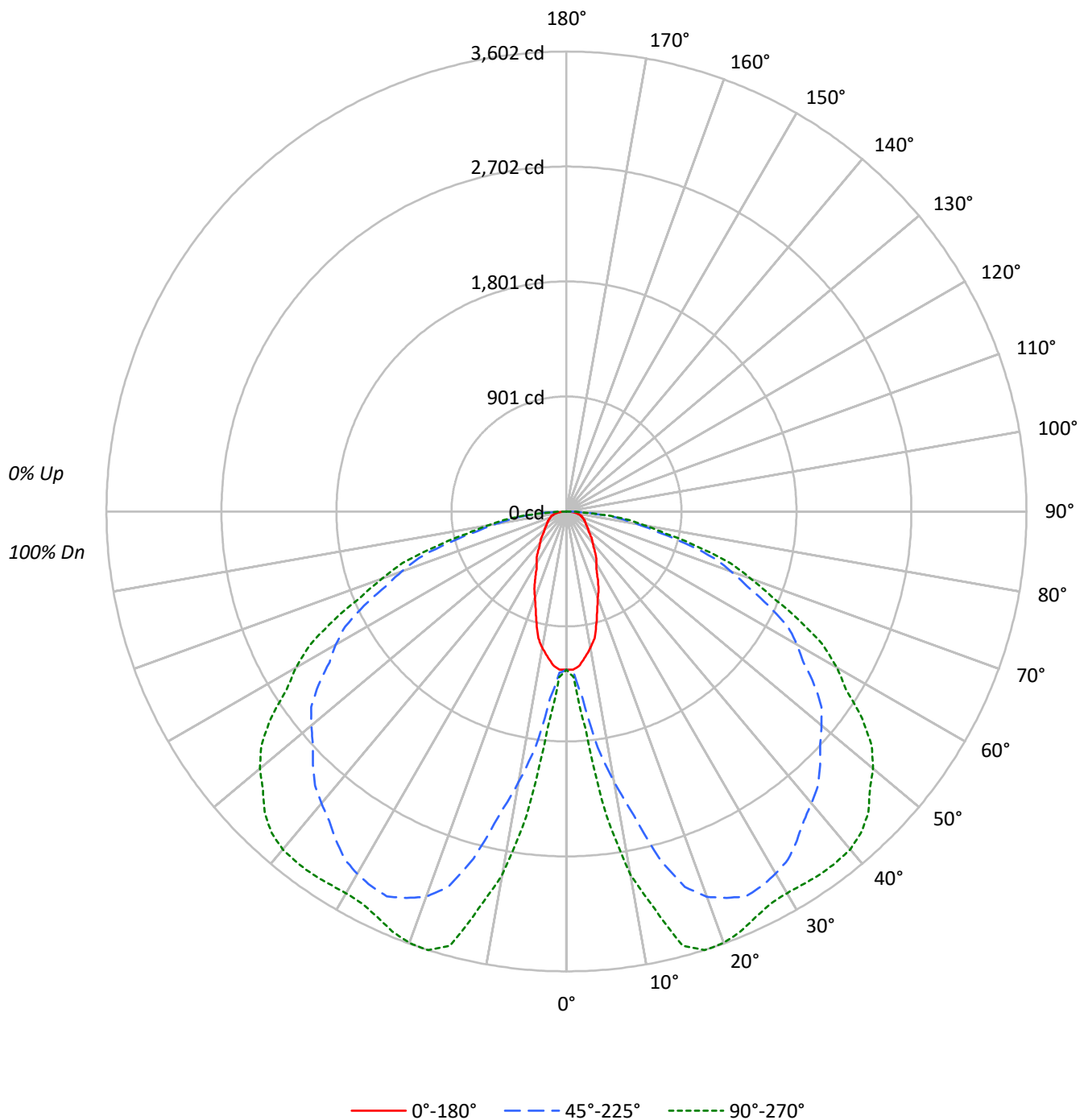
Lumens per Lamp: N/A
Luminaire Lumens: 9594.6 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3813	3813	3813
5°	3729	4535	5280
10°	3386	6710	9013
15°	2881	8967	11207
20°	2349	10509	11768
25°	1961	11289	11891
30°	1656	11637	12260
35°	1467	11809	13021
40°	1280	11979	13876
45°	1162	12215	14529
50°	1068	12474	14991
55°	1026	12707	15155
60°	1054	12824	15031
65°	1102	12721	14592
70°	1183	12331	13801
75°	1326	11440	12648
80°	1482	9884	11014
85°	1408	8229	9425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 15217 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	1.7
10°-20°	708.3	7.4
20°-30°	1241.2	12.9
30°-40°	1598.2	16.7
40°-50°	1784.4	18.6
50°-60°	1711.1	17.8
60°-70°	1361.8	14.2
70°-80°	802.3	8.4
80°-90°	224.9	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°	2112.1	22.0
0°-40°	3710.3	38.7
0°-60°	7205.7	75.1
0°-90°	9594.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9594.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1240	1240	1240	1240	1240	
5°	1208	1295	1469	1657	1710	111
15°	905	1662	2816	3405	3520	251
25°	578	1886	3327	3498	3504	267
35°	391	1769	3145	3337	3468	244
45°	267	1388	2808	3191	3341	207
55°	191	927	2370	2741	2826	174
65°	152	606	1748	1973	2005	150
75°	112	382	963	1049	1064	116
85°	40	104	233	262	267	45
90°	0	0	0	0	0	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8	1239.8
2.5°	1239.8	1239.8	1246.2	1255.7	1258.9	1271.7	1290.8	1300.4	1306.8	1300.4
5°	1207.9	1223.8	1275.7	1351.4	1427.1	1510.9	1618.5	1670.3	1702.2	1710.2
7.5°	1144.9	1188.8	1336.3	1534.0	1754.0	1972.5	2161.5	2314.5	2403.8	2407.8
10°	1084.3	1160.1	1387.3	1690.3	1993.2	2304.2	2563.3	2722.7	2850.3	2886.2
12.5°	1017.3	1131.4	1441.5	1846.5	2261.1	2610.3	2898.1	3073.6	3175.6	3189.2
15°	904.9	1072.4	1518.8	2092.9	2607.1	3025.7	3300.8	3440.3	3504.1	3520.0
17.5°	800.5	1019.7	1586.6	2285.8	2895.0	3272.1	3481.0	3568.7	3600.6	3602.2
20°	717.6	968.7	1618.5	2419.8	3041.7	3380.5	3532.0	3587.8	3603.8	3595.8
22.5°	657.0	914.5	1637.6	2509.1	3131.0	3422.0	3535.2	3562.3	3568.7	3560.7
25°	578.0	825.2	1638.4	2627.1	3221.1	3432.3	3492.1	3500.1	3508.1	3504.1
27.5°	507.9	725.5	1614.5	2705.2	3233.8	3383.7	3411.6	3431.5	3456.3	3461.8
30°	466.4	661.8	1582.6	2730.7	3221.1	3332.7	3360.6	3396.5	3440.3	3452.3
32.5°	434.5	601.2	1534.8	2733.9	3189.2	3272.1	3309.6	3377.3	3440.3	3458.6
35°	390.7	510.3	1455.1	2710.8	3117.4	3173.2	3252.9	3364.6	3448.3	3468.2
37.5°	347.6	444.9	1346.6	2663.7	3023.3	3081.5	3213.1	3347.8	3441.1	3465.8
40°	318.9	406.6	1263.7	2619.1	2950.0	3017.7	3181.2	3328.7	3428.3	3456.3
42.5°	296.6	374.7	1174.4	2561.7	2867.1	2960.3	3142.9	3300.0	3393.3	3414.8
45°	267.1	326.9	1032.5	2455.7	2738.7	2878.2	3077.5	3229.0	3316.7	3340.6
47.5°	239.2	293.4	884.2	2334.5	2607.9	2778.6	2982.7	3126.2	3206.7	3222.6
50°	223.2	271.1	785.3	2248.4	2515.4	2698.8	2906.1	3049.6	3117.4	3133.3
52.5°	210.5	251.9	692.8	2149.5	2419.8	2615.9	2813.6	2944.4	3005.8	3012.2
55°	191.3	227.2	570.1	1997.2	2268.3	2471.6	2662.9	2766.6	2810.4	2826.4
57.5°	181.0	208.9	473.6	1832.2	2097.7	2301.8	2475.6	2556.1	2591.2	2596.8
60°	171.4	199.3	422.6	1714.2	1989.2	2180.6	2332.1	2399.8	2431.7	2443.7
62.5°	161.8	192.9	384.3	1593.0	1861.7	2046.6	2179.0	2237.2	2262.7	2265.1
65°	151.5	183.4	338.8	1407.2	1662.3	1833.8	1937.4	1985.3	1997.2	2005.2
67.5°	141.1	173.8	306.2	1219.9	1456.6	1598.6	1675.1	1716.6	1719.0	1735.7
70°	131.6	167.4	287.0	1092.3	1303.6	1439.1	1502.9	1534.8	1530.8	1534.8
72.5°	125.2	157.9	274.3	961.5	1156.9	1263.7	1321.1	1343.4	1345.8	1346.6
75°	111.6	139.5	255.1	761.4	916.9	1008.6	1052.4	1048.4	1060.4	1064.4
77.5°	96.5	120.4	209.7	561.3	687.3	747.9	782.9	794.1	790.1	790.9
80°	83.7	107.6	171.4	430.5	534.2	582.0	613.9	621.9	617.9	621.9
82.5°	67.8	88.5	133.1	318.9	400.2	438.5	460.8	462.4	464.8	472.0
85°	39.9	51.8	79.7	175.4	223.2	243.2	259.1	263.1	267.1	267.1
87.5°	15.9	22.3	41.5	73.4	92.5	98.9	98.9	92.5	98.9	89.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)