

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-6

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-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

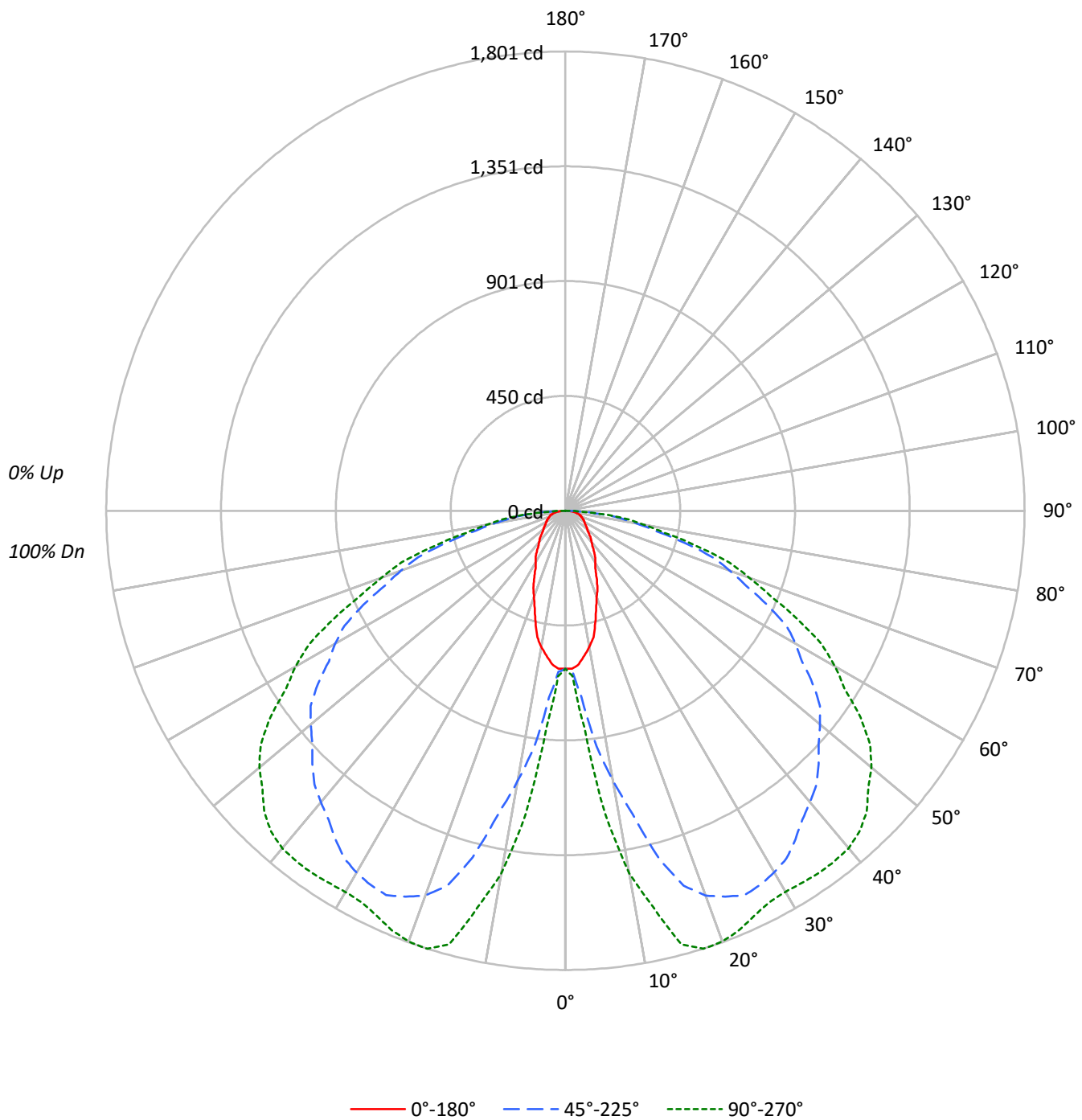
Lumens per Lamp: N/A
Luminaire Lumens: 4797.3 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 55.3
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°	3813	3813	3813
5°	3729	4535	5280
10°	3386	6710	9013
15°	2881	8967	11207
20°	2349	10509	11768
25°	1961	11289	11890
30°	1656	11636	12259
35°	1466	11809	13021
40°	1281	11979	13875
45°	1161	12214	14529
50°	1068	12474	14992
55°	1026	12707	15155
60°	1054	12824	15030
65°	1102	12721	14592
70°	1183	12331	13801
75°	1326	11439	12648
80°	1484	9884	11012
85°	1404	8229	9421

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°	81.3	1.7
10°-20°	354.1	7.4
20°-30°	620.6	12.9
30°-40°	799.1	16.7
40°-50°	892.2	18.6
50°-60°	855.6	17.8
60°-70°	680.9	14.2
70°-80°	401.1	8.4
80°-90°	112.4	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°	1056.0	22.0
0°-40°	1855.1	38.7
0°-60°	3602.9	75.1
0°-90°	4797.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4797.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	604	647	734	829	855	55
15°	452	831	1408	1703	1760	126
25°	289	943	1663	1749	1752	133
35°	195	884	1573	1668	1734	122
45°	134	694	1404	1596	1670	103
55°	96	463	1185	1370	1413	87
65°	76	303	874	987	1003	75
75°	56	191	481	525	532	58
85°	20	52	117	131	134	23
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9
2.5°	619.9	619.9	623.1	627.9	629.5	635.8	645.4	650.2	653.4	650.2
5°	603.9	611.9	637.8	675.7	713.6	755.4	809.2	835.2	851.1	855.1
7.5°	572.5	594.4	668.1	767.0	877.0	986.2	1080.7	1157.3	1201.9	1203.9
10°	542.2	580.0	693.6	845.1	996.6	1152.1	1281.6	1361.4	1425.2	1443.1
12.5°	508.7	565.7	720.8	923.3	1130.6	1305.2	1449.1	1536.8	1587.8	1594.6
15°	452.5	536.2	759.4	1046.4	1303.6	1512.9	1650.4	1720.2	1752.0	1760.0
17.5°	400.2	509.9	793.3	1142.9	1447.5	1636.0	1740.5	1784.3	1800.3	1801.1
20°	358.8	484.4	809.2	1209.9	1520.8	1690.3	1766.0	1793.9	1801.9	1797.9
22.5°	328.5	457.2	818.8	1254.5	1565.5	1711.0	1767.6	1781.1	1784.3	1780.3
25°	289.0	412.6	819.2	1313.5	1610.5	1716.2	1746.1	1750.1	1754.0	1752.0
27.5°	253.9	362.8	807.3	1352.6	1616.9	1691.8	1705.8	1715.8	1728.1	1730.9
30°	233.2	330.9	791.3	1365.4	1610.5	1666.3	1680.3	1698.2	1720.2	1726.1
32.5°	217.3	300.6	767.4	1367.0	1594.6	1636.0	1654.8	1688.7	1720.2	1729.3
35°	195.3	255.1	727.5	1355.4	1558.7	1586.6	1626.5	1682.3	1724.1	1734.1
37.5°	173.8	222.4	673.3	1331.9	1511.7	1540.8	1606.5	1673.9	1720.6	1732.9
40°	159.5	203.3	631.9	1309.5	1475.0	1508.9	1590.6	1664.3	1714.2	1728.1
42.5°	148.3	187.4	587.2	1280.8	1433.5	1480.2	1571.5	1650.0	1696.6	1707.4
45°	133.5	163.4	516.2	1227.8	1369.3	1439.1	1538.8	1614.5	1658.4	1670.3
47.5°	119.6	146.7	442.1	1167.2	1304.0	1389.3	1491.3	1563.1	1603.4	1611.3
50°	111.6	135.5	392.7	1124.2	1257.7	1349.4	1453.1	1524.8	1558.7	1566.7
52.5°	105.2	126.0	346.4	1074.7	1209.9	1308.0	1406.8	1472.2	1502.9	1506.1
55°	95.7	113.6	285.0	998.6	1134.1	1235.8	1331.5	1383.3	1405.2	1413.2
57.5°	90.5	104.4	236.8	916.1	1048.8	1150.9	1237.8	1278.1	1295.6	1298.4
60°	85.7	99.7	211.3	857.1	994.6	1090.3	1166.0	1199.9	1215.9	1221.8
62.5°	80.9	96.5	192.1	796.5	930.8	1023.3	1089.5	1118.6	1131.4	1132.6
65°	75.7	91.7	169.4	703.6	831.2	916.9	968.7	992.6	998.6	1002.6
67.5°	70.6	86.9	153.1	609.9	728.3	799.3	837.6	858.3	859.5	867.9
70°	65.8	83.7	143.5	546.1	651.8	719.6	751.4	767.4	765.4	767.4
72.5°	62.6	78.9	137.1	480.8	578.4	631.9	660.6	671.7	672.9	673.3
75°	55.8	69.8	127.6	380.7	458.4	504.3	526.2	524.2	530.2	532.2
77.5°	48.2	60.2	104.8	280.6	343.6	373.9	391.5	397.1	395.1	395.5
80°	41.9	53.8	85.7	215.3	267.1	291.0	307.0	310.9	308.9	310.9
82.5°	33.9	44.2	66.6	159.5	200.1	219.3	230.4	231.2	232.4	236.0
85°	19.9	25.9	39.9	87.7	111.6	121.6	129.6	131.6	133.5	133.5
87.5°	8.0	11.2	20.7	36.7	46.2	49.4	49.4	46.2	49.4	44.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)