

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-075D-830-1D-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-075D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

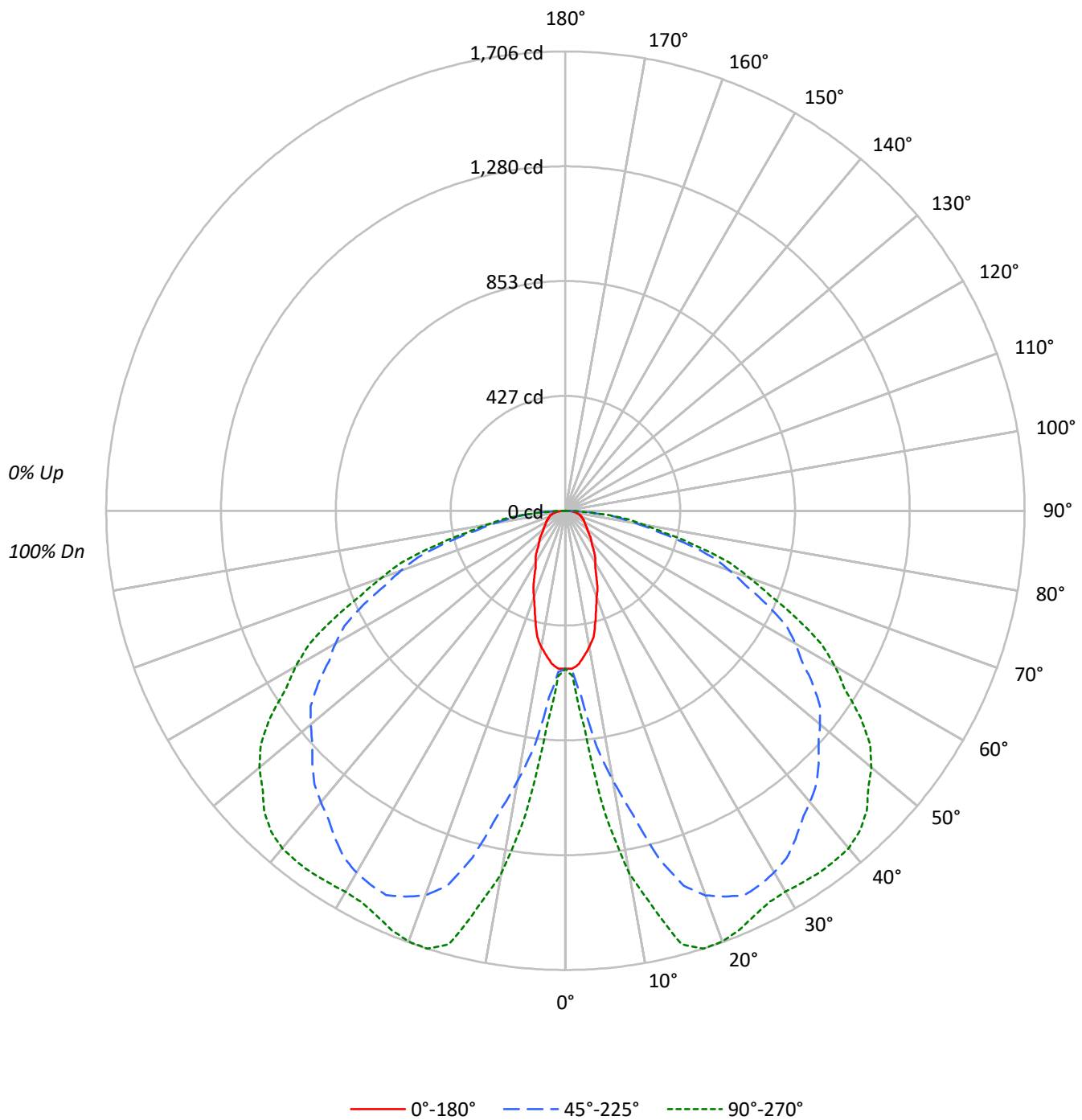
Lumens per Lamp: N/A
Luminaire Lumens: 4543.5 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 54.4
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°	2708	2708	2708
5°	2649	3221	3750
10°	2405	4766	6402
15°	2046	6370	7961
20°	1668	7465	8359
25°	1393	8019	8446
30°	1177	8266	8708
35°	1042	8388	9249
40°	909	8509	9856
45°	825	8676	10321
50°	759	8860	10649
55°	729	9026	10764
60°	749	9109	10677
65°	783	9036	10365
70°	840	8759	9803
75°	943	8126	8983
80°	1052	7021	7824
85°	1000	5846	6696

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 10809 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	1.7
10°-20°	335.4	7.4
20°-30°	587.8	12.9
30°-40°	756.8	16.7
40°-50°	845.0	18.6
50°-60°	810.3	17.8
60°-70°	644.9	14.2
70°-80°	379.9	8.4
80°-90°	106.5	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°	1000.2	22.0
0°-40°	1757.0	38.7
0°-60°	3412.3	75.1
0°-90°	4543.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4543.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	572	613	696	785	810	53
15°	428	787	1334	1613	1667	119
25°	274	893	1575	1657	1659	126
35°	185	838	1489	1580	1642	116
45°	126	657	1330	1511	1582	98
55°	91	439	1122	1298	1338	83
65°	72	287	828	934	950	71
75°	53	181	456	497	504	55
85°	19	49	110	124	126	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	587.1	587.1	587.1	587.1	587.1	587.1	587.1	587.1	587.1	587.1
2.5°	587.1	587.1	590.1	594.7	596.2	602.2	611.3	615.8	618.8	615.8
5°	572.0	579.5	604.1	640.0	675.8	715.5	766.4	791.0	806.1	809.9
7.5°	542.2	562.9	632.8	726.4	830.6	934.1	1023.6	1096.0	1138.3	1140.2
10°	513.5	549.3	656.9	800.4	943.9	1091.1	1213.8	1289.4	1349.8	1366.8
12.5°	481.8	535.8	682.6	874.4	1070.7	1236.1	1372.4	1455.5	1503.8	1510.2
15°	428.5	507.8	719.2	991.1	1234.6	1432.8	1563.1	1629.2	1659.4	1666.9
17.5°	379.1	482.9	751.3	1082.5	1370.9	1549.5	1648.4	1689.9	1705.0	1705.8
20°	339.8	458.7	766.4	1145.9	1440.4	1600.8	1672.6	1699.0	1706.6	1702.8
22.5°	311.1	433.1	775.5	1188.2	1482.7	1620.5	1674.1	1686.9	1689.9	1686.2
25°	273.7	390.8	775.9	1244.0	1525.3	1625.4	1653.7	1657.5	1661.2	1659.4
27.5°	240.5	343.6	764.6	1281.0	1531.4	1602.3	1615.6	1625.0	1636.7	1639.3
30°	220.9	313.4	749.4	1293.1	1525.3	1578.2	1591.4	1608.4	1629.2	1634.8
32.5°	205.8	284.7	726.8	1294.6	1510.2	1549.5	1567.2	1599.3	1629.2	1637.8
35°	185.0	241.6	689.0	1283.7	1476.2	1502.7	1540.4	1593.3	1632.9	1642.4
37.5°	164.6	210.7	637.7	1261.4	1431.7	1459.3	1521.6	1585.4	1629.5	1641.2
40°	151.0	192.6	598.4	1240.3	1397.0	1429.1	1506.4	1576.3	1623.5	1636.7
42.5°	140.5	177.5	556.1	1213.1	1357.7	1401.9	1488.3	1562.7	1606.9	1617.1
45°	126.5	154.8	488.9	1162.9	1296.9	1363.0	1457.4	1529.1	1570.6	1582.0
47.5°	113.3	138.9	418.7	1105.5	1235.0	1315.8	1412.4	1480.4	1518.5	1526.1
50°	105.7	128.4	371.9	1064.7	1191.2	1278.0	1376.2	1444.2	1476.2	1483.8
52.5°	99.7	119.3	328.1	1017.9	1145.9	1238.8	1332.4	1394.3	1423.4	1426.4
55°	90.6	107.6	270.0	945.8	1074.1	1170.4	1261.0	1310.1	1330.9	1338.4
57.5°	85.7	98.9	224.3	867.6	993.4	1090.0	1172.3	1210.4	1227.1	1229.7
60°	81.2	94.4	200.1	811.7	942.0	1032.6	1104.4	1136.4	1151.5	1157.2
62.5°	76.6	91.4	182.0	754.4	881.6	969.2	1031.9	1059.4	1071.5	1072.6
65°	71.7	86.8	160.5	666.4	787.2	868.4	917.5	940.1	945.8	949.6
67.5°	66.8	82.3	145.0	577.7	689.8	757.0	793.2	812.9	814.0	821.9
70°	62.3	79.3	135.9	517.3	617.3	681.5	711.7	726.8	724.9	726.8
72.5°	59.3	74.8	129.9	455.3	547.8	598.4	625.6	636.2	637.3	637.7
75°	52.9	66.1	120.8	360.6	434.2	477.6	498.4	496.5	502.1	504.0
77.5°	45.7	57.0	99.3	265.8	325.5	354.1	370.8	376.0	374.2	374.5
80°	39.6	51.0	81.2	203.9	253.0	275.6	290.7	294.5	292.6	294.5
82.5°	32.1	41.9	63.1	151.0	189.5	207.7	218.2	219.0	220.1	223.5
85°	18.9	24.5	37.8	83.1	105.7	115.2	122.7	124.6	126.5	126.5
87.5°	7.6	10.6	19.6	34.7	43.8	46.8	46.8	43.8	46.8	42.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)