

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-050D-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-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

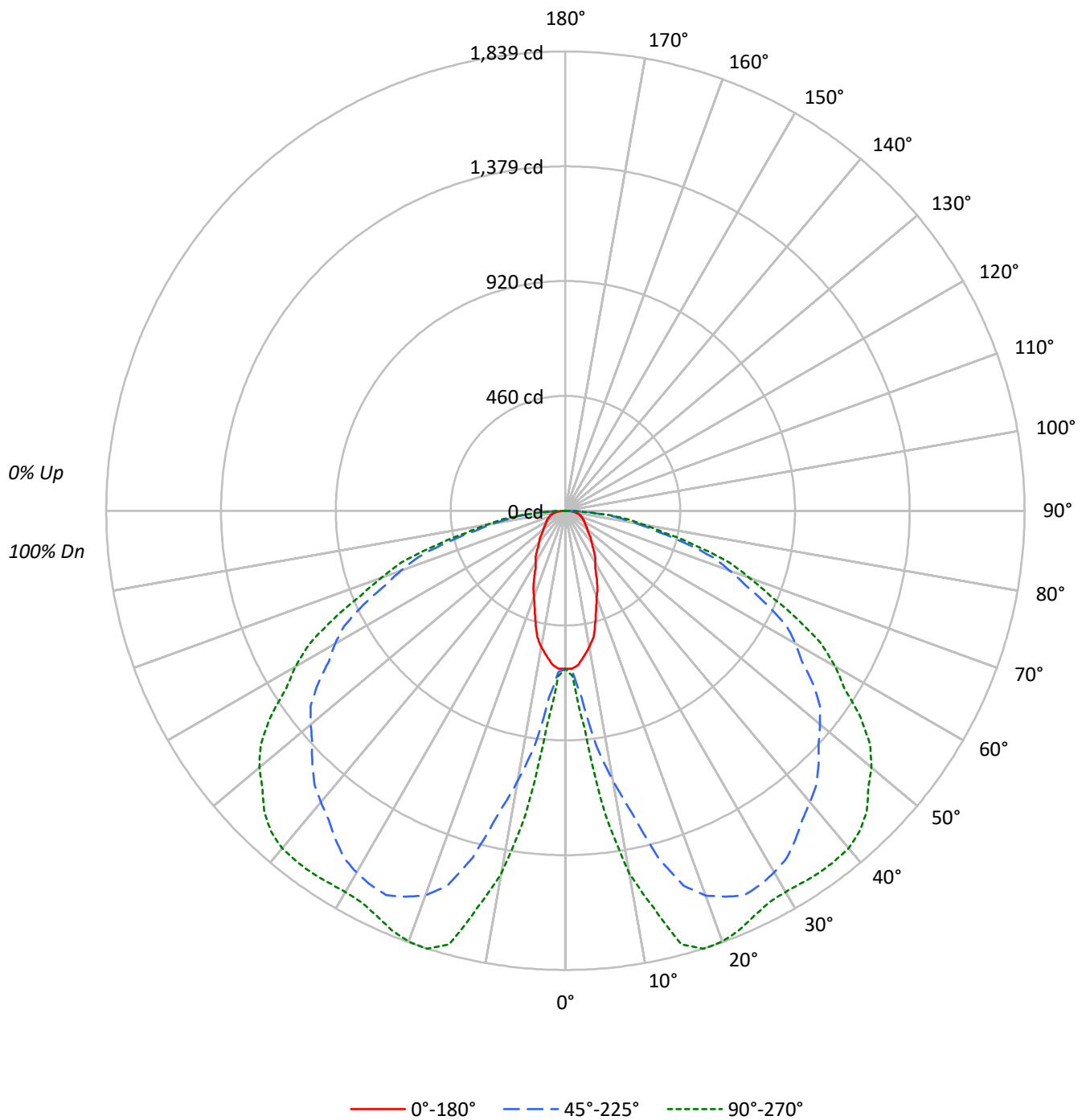
Lumens per Lamp: N/A
Luminaire Lumens: 4898.8 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 53.4
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°	1947	1947	1947
5°	1904	2316	2696
10°	1729	3426	4602
15°	1471	4578	5722
20°	1199	5366	6008
25°	1001	5764	6071
30°	846	5941	6259
35°	749	6029	6648
40°	654	6116	7085
45°	593	6236	7418
50°	545	6369	7654
55°	524	6488	7738
60°	538	6548	7674
65°	563	6495	7450
70°	604	6296	7046
75°	677	5841	6457
80°	756	5047	5623
85°	720	4203	4813

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7769 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	1.7
10°-20°	361.6	7.4
20°-30°	633.7	12.9
30°-40°	816.0	16.7
40°-50°	911.0	18.6
50°-60°	873.7	17.8
60°-70°	695.3	14.2
70°-80°	409.6	8.4
80°-90°	114.8	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°	1078.4	22.0
0°-40°	1894.4	38.7
0°-60°	3679.0	75.1
0°-90°	4898.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4898.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	617	661	750	846	873	57
15°	462	849	1438	1739	1797	128
25°	295	963	1699	1786	1789	136
35°	200	903	1606	1704	1771	125
45°	136	709	1434	1629	1706	106
55°	98	473	1210	1399	1443	89
65°	77	309	893	1008	1024	77
75°	57	195	492	536	543	59
85°	20	53	119	134	136	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°	633.0	633.0	633.0	633.0	633.0	633.0	633.0	633.0	633.0	633.0
2.5°	633.0	633.0	636.3	641.1	642.8	649.3	659.1	663.9	667.2	663.9
5°	616.7	624.9	651.3	690.0	728.7	771.4	826.4	852.8	869.1	873.2
7.5°	584.6	606.9	682.3	783.2	895.6	1007.1	1103.6	1181.7	1227.3	1229.4
10°	553.6	592.3	708.3	863.0	1017.7	1176.4	1308.7	1390.2	1455.3	1473.6
12.5°	519.4	577.6	736.0	942.8	1154.5	1332.8	1479.7	1569.3	1621.4	1628.3
15°	462.0	547.5	775.5	1068.6	1331.1	1544.9	1685.3	1756.5	1789.1	1797.2
17.5°	408.7	520.6	810.1	1167.1	1478.1	1670.6	1777.3	1822.1	1838.4	1839.2
20°	366.4	494.6	826.4	1235.5	1553.0	1726.0	1803.3	1831.8	1840.0	1835.9
22.5°	335.4	466.9	836.1	1281.1	1598.6	1747.2	1805.0	1818.8	1822.1	1818.0
25°	295.1	421.3	836.5	1341.3	1644.6	1752.5	1783.0	1787.1	1791.1	1789.1
27.5°	259.3	370.4	824.3	1381.2	1651.1	1727.6	1741.9	1752.1	1764.7	1767.5
30°	238.1	337.9	808.0	1394.2	1644.6	1701.6	1715.8	1734.1	1756.5	1762.6
32.5°	221.9	306.9	783.6	1395.9	1628.3	1670.6	1689.8	1724.4	1756.5	1765.9
35°	199.5	260.5	742.9	1384.1	1591.7	1620.2	1660.9	1717.9	1760.6	1770.8
37.5°	177.5	227.1	687.6	1360.0	1543.6	1573.3	1640.5	1709.3	1756.9	1769.6
40°	162.8	207.6	645.2	1337.2	1506.2	1540.8	1624.2	1699.5	1750.4	1764.7
42.5°	151.4	191.3	599.6	1307.9	1463.8	1511.5	1604.7	1684.9	1732.5	1743.5
45°	136.4	166.9	527.2	1253.8	1398.3	1469.5	1571.3	1648.7	1693.4	1705.6
47.5°	122.1	149.8	451.4	1191.9	1331.5	1418.7	1522.9	1596.1	1637.3	1645.4
50°	114.0	138.4	401.0	1148.0	1284.3	1378.0	1483.8	1557.1	1591.7	1599.8
52.5°	107.5	128.6	353.7	1097.5	1235.5	1335.6	1436.6	1503.3	1534.7	1537.9
55°	97.7	116.0	291.1	1019.7	1158.1	1261.9	1359.6	1412.6	1434.9	1443.1
57.5°	92.4	106.7	241.8	935.5	1071.0	1175.2	1264.0	1305.1	1323.0	1325.8
60°	87.5	101.8	215.8	875.2	1015.7	1113.4	1190.7	1225.3	1241.6	1247.7
62.5°	82.6	98.5	196.2	813.3	950.5	1045.0	1112.5	1142.3	1155.3	1156.5
65°	77.3	93.6	173.0	718.5	848.8	936.3	989.2	1013.6	1019.7	1023.8
67.5°	72.1	88.7	156.3	622.8	743.7	816.2	855.3	876.4	877.7	886.2
70°	67.2	85.5	146.5	557.7	665.6	734.8	767.3	783.6	781.6	783.6
72.5°	63.9	80.6	140.0	490.9	590.7	645.2	674.5	685.9	687.1	687.6
75°	57.0	71.2	130.3	388.8	468.1	515.0	537.3	535.3	541.4	543.4
77.5°	49.3	61.5	107.1	286.6	350.9	381.8	399.7	405.4	403.4	403.8
80°	42.7	55.0	87.5	219.8	272.7	297.2	313.4	317.5	315.5	317.5
82.5°	34.6	45.2	68.0	162.8	204.4	223.9	235.3	236.1	237.3	241.0
85°	20.4	26.5	40.7	89.6	114.0	124.2	132.3	134.3	136.4	136.4
87.5°	8.1	11.4	21.2	37.5	47.2	50.5	50.5	47.2	50.5	45.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)