

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-830-1D-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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

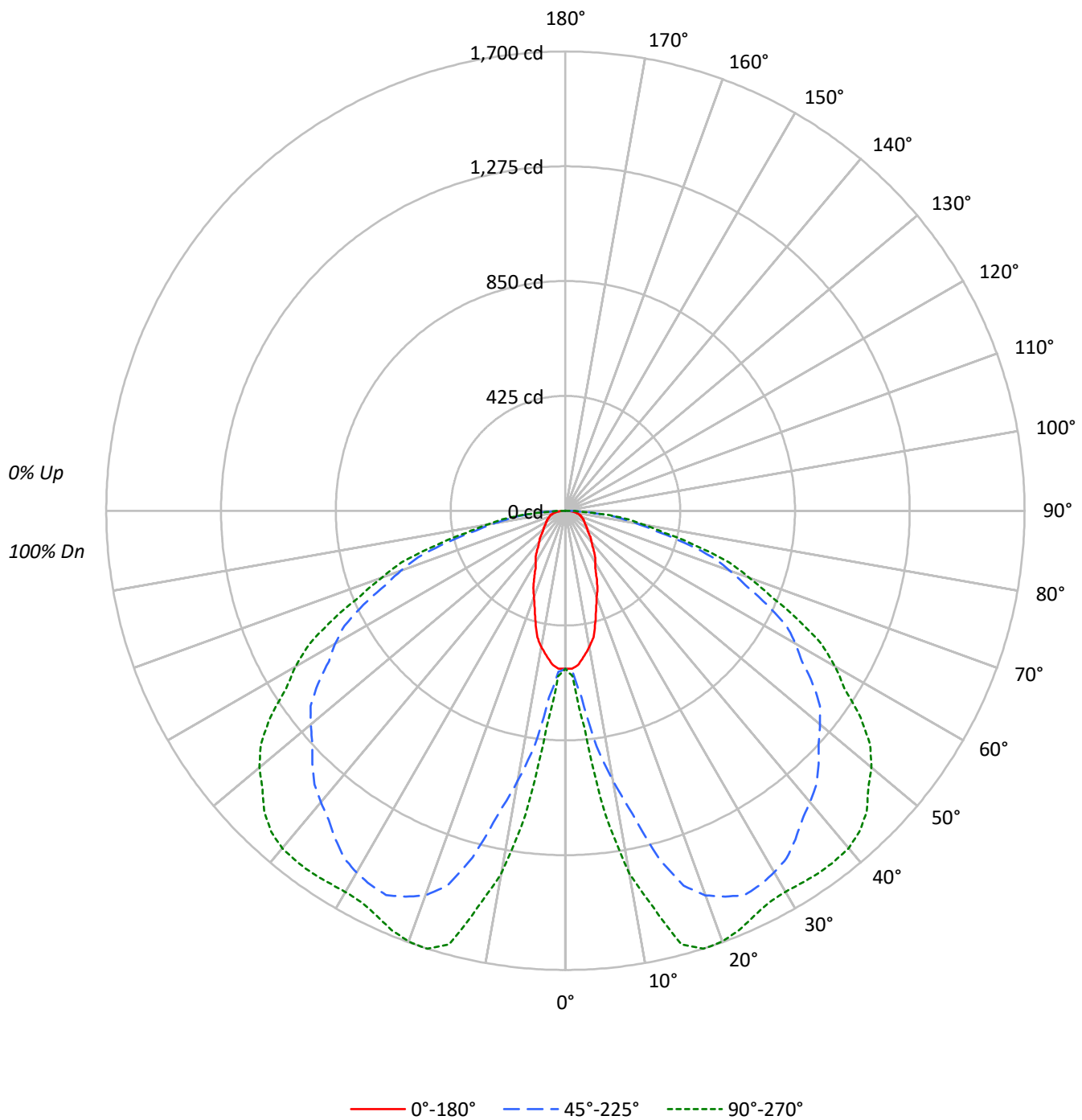
Lumens per Lamp: N/A
Luminaire Lumens: 4528.1 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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°	3599	3599	3599
5°	3520	4280	4983
10°	3196	6333	8507
15°	2720	8464	10579
20°	2217	9919	11108
25°	1851	10655	11223
30°	1563	10984	11572
35°	1385	11146	12290
40°	1208	11307	13097
45°	1097	11529	13714
50°	1009	11774	14151
55°	968	11994	14304
60°	995	12104	14187
65°	1041	12006	13772
70°	1117	11639	13026
75°	1252	10798	11937
80°	1399	9330	10396
85°	1327	7770	8899

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 14364 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	1.7
10°-20°	334.3	7.4
20°-30°	585.8	12.9
30°-40°	754.3	16.7
40°-50°	842.1	18.6
50°-60°	807.5	17.8
60°-70°	642.7	14.2
70°-80°	378.6	8.4
80°-90°	106.1	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°	996.8	22.0
0°-40°	1751.0	38.7
0°-60°	3400.7	75.1
0°-90°	4528.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4528.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	570	611	693	782	807	52
15°	427	785	1329	1607	1661	119
25°	273	890	1570	1651	1654	126
35°	184	835	1484	1575	1637	115
45°	126	655	1325	1506	1577	98
55°	90	437	1118	1293	1334	82
65°	72	286	825	931	946	71
75°	53	180	454	495	502	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°	585.1	585.1	585.1	585.1	585.1	585.1	585.1	585.1	585.1	585.1
2.5°	585.1	585.1	588.1	592.6	594.1	600.2	609.2	613.7	616.7	613.7
5°	570.1	577.6	602.0	637.8	673.5	713.0	763.8	788.3	803.4	807.1
7.5°	540.3	561.0	630.6	724.0	827.8	930.9	1020.1	1092.3	1134.5	1136.4
10°	511.7	547.5	654.7	797.7	940.7	1087.4	1209.7	1285.0	1345.2	1362.1
12.5°	480.1	533.9	680.3	871.5	1067.1	1231.9	1367.8	1450.6	1498.7	1505.1
15°	427.1	506.1	716.8	987.7	1230.4	1428.0	1557.8	1623.6	1653.7	1661.3
17.5°	377.8	481.3	748.8	1078.8	1366.3	1544.2	1642.8	1684.2	1699.3	1700.0
20°	338.7	457.2	763.8	1142.0	1435.5	1595.4	1666.9	1693.3	1700.8	1697.0
22.5°	310.1	431.6	772.9	1184.1	1477.6	1615.0	1668.4	1681.2	1684.2	1680.5
25°	272.8	389.4	773.3	1239.8	1520.2	1619.9	1648.1	1651.9	1655.6	1653.7
27.5°	239.7	342.4	762.0	1276.7	1526.2	1596.9	1610.1	1619.5	1631.2	1633.8
30°	220.1	312.3	746.9	1288.8	1520.2	1572.8	1586.0	1602.9	1623.6	1629.3
32.5°	205.1	283.7	724.3	1290.3	1505.1	1544.2	1561.9	1593.9	1623.6	1632.3
35°	184.4	240.8	686.7	1279.3	1471.2	1497.6	1535.2	1587.9	1627.4	1636.8
37.5°	164.1	210.0	635.5	1257.1	1426.8	1454.3	1516.4	1580.0	1624.0	1635.7
40°	150.5	191.9	596.4	1236.1	1392.2	1424.2	1501.3	1571.0	1618.0	1631.2
42.5°	140.0	176.9	554.3	1209.0	1353.1	1397.1	1483.3	1557.4	1601.4	1611.6
45°	126.1	154.3	487.3	1158.9	1292.5	1358.4	1452.4	1523.9	1565.3	1576.6
47.5°	112.9	138.5	417.3	1101.7	1230.8	1311.3	1407.7	1475.4	1513.4	1520.9
50°	105.4	127.9	370.6	1061.1	1187.2	1273.7	1371.5	1439.3	1471.2	1478.8
52.5°	99.3	118.9	327.0	1014.4	1142.0	1234.6	1327.9	1389.6	1418.6	1421.6
55°	90.3	107.2	269.0	942.6	1070.5	1166.5	1256.8	1305.7	1326.4	1333.9
57.5°	85.4	98.6	223.5	864.7	990.0	1086.3	1168.3	1206.3	1222.9	1225.5
60°	80.9	94.1	199.4	809.0	938.8	1029.1	1100.6	1132.6	1147.6	1153.3
62.5°	76.4	91.1	181.4	751.8	878.6	965.9	1028.4	1055.8	1067.9	1069.0
65°	71.5	86.5	159.9	664.1	784.5	865.4	914.4	936.9	942.6	946.3
67.5°	66.6	82.0	144.5	575.7	687.5	754.4	790.6	810.1	811.3	819.2
70°	62.1	79.0	135.5	515.5	615.2	679.2	709.3	724.3	722.5	724.3
72.5°	59.1	74.5	129.4	453.8	546.0	596.4	623.5	634.0	635.2	635.5
75°	52.7	65.8	120.4	359.3	432.7	476.0	496.7	494.8	500.4	502.3
77.5°	45.5	56.8	99.0	264.9	324.4	352.9	369.5	374.8	372.9	373.3
80°	39.5	50.8	80.9	203.2	252.1	274.7	289.7	293.5	291.6	293.5
82.5°	32.0	41.8	62.8	150.5	188.9	207.0	217.5	218.2	219.4	222.8
85°	18.8	24.5	37.6	82.8	105.4	114.8	122.3	124.2	126.1	126.1
87.5°	7.5	10.5	19.6	34.6	43.6	46.7	46.7	43.6	46.7	42.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)