

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-830-1D-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-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

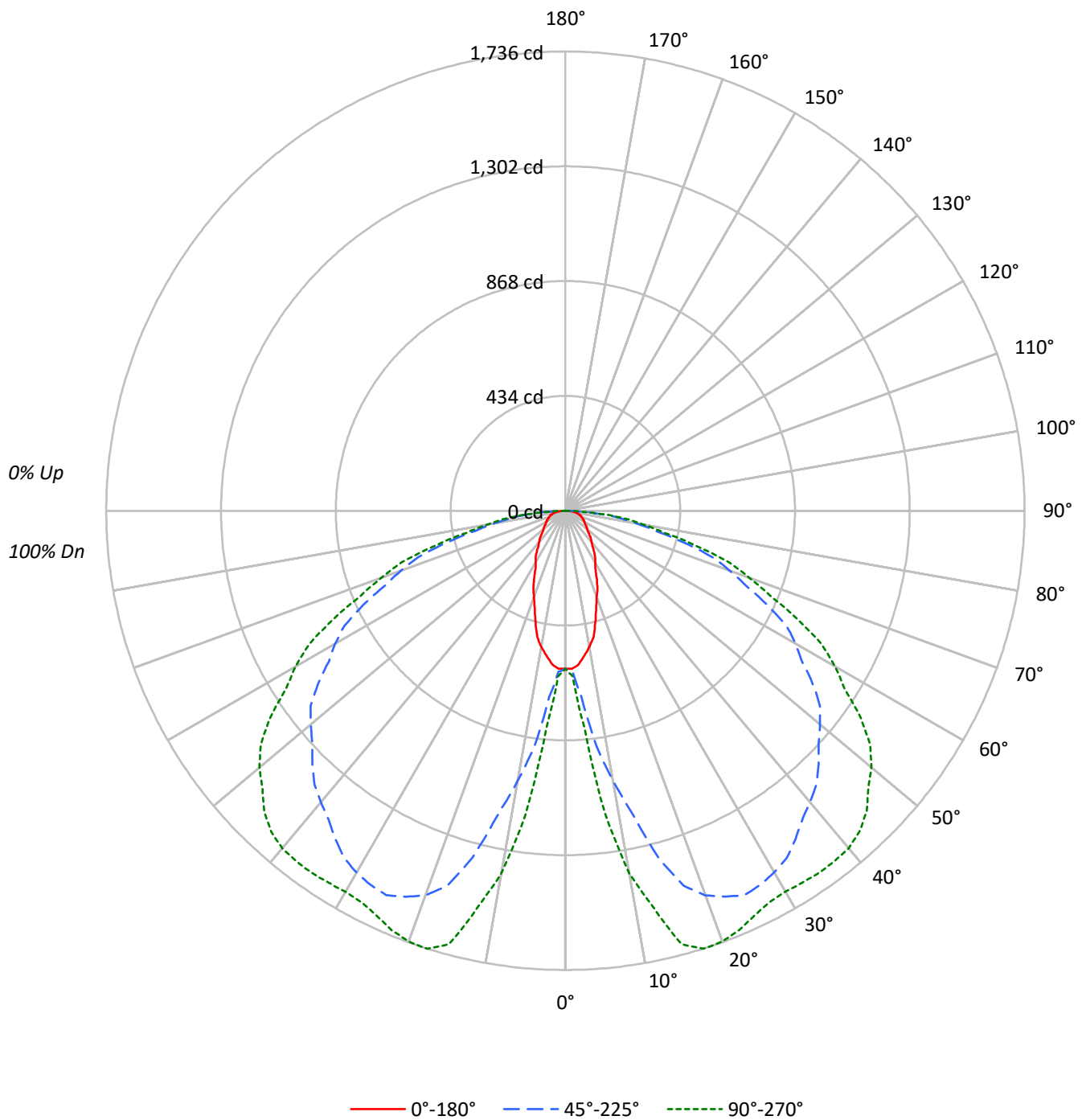
Lumens per Lamp: N/A
Luminaire Lumens: 4623.9 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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
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°	1838	1838	1838
5°	1797	2186	2544
10°	1632	3234	4344
15°	1388	4322	5401
20°	1132	5065	5671
25°	945	5440	5730
30°	798	5608	5908
35°	707	5691	6275
40°	617	5773	6687
45°	560	5887	7002
50°	515	6011	7225
55°	494	6124	7303
60°	508	6180	7244
65°	531	6130	7033
70°	570	5942	6651
75°	639	5513	6096
80°	714	4763	5308
85°	677	3966	4541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7333 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	1.7
10°-20°	341.3	7.4
20°-30°	598.2	12.9
30°-40°	770.2	16.7
40°-50°	859.9	18.6
50°-60°	824.6	17.8
60°-70°	656.3	14.2
70°-80°	386.6	8.4
80°-90°	108.4	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°	1017.9	22.0
0°-40°	1788.1	38.7
0°-60°	3472.6	75.1
0°-90°	4623.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4623.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	582	624	708	799	824	53
15°	436	801	1357	1641	1696	121
25°	279	909	1603	1686	1689	128
35°	188	852	1516	1608	1671	118
45°	129	669	1353	1538	1610	100
55°	92	447	1142	1321	1362	84
65°	73	292	842	951	966	72
75°	54	184	464	506	513	56
85°	19	50	112	126	129	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5
2.5°	597.5	597.5	600.6	605.2	606.7	612.9	622.1	626.7	629.8	626.7
5°	582.1	589.8	614.8	651.3	687.8	728.1	780.0	805.0	820.3	824.2
7.5°	551.8	572.9	644.0	739.3	845.3	950.6	1041.7	1115.4	1158.5	1160.4
10°	522.6	559.1	668.6	814.6	960.6	1110.4	1235.3	1312.2	1373.6	1390.9
12.5°	490.3	545.2	694.7	889.9	1089.7	1258.0	1396.7	1481.2	1530.4	1536.9
15°	436.1	516.8	732.0	1008.6	1256.5	1458.2	1590.7	1658.0	1688.7	1696.4
17.5°	385.8	491.4	764.6	1101.6	1395.2	1576.9	1677.6	1719.8	1735.2	1736.0
20°	345.8	466.8	780.0	1166.2	1465.9	1629.2	1702.2	1729.1	1736.7	1732.9
22.5°	316.6	440.7	789.2	1209.2	1508.9	1649.1	1703.7	1716.8	1719.8	1716.0
25°	278.6	397.7	789.6	1266.1	1552.3	1654.1	1683.0	1686.8	1690.6	1688.7
27.5°	244.8	349.7	778.1	1303.7	1558.5	1630.7	1644.1	1653.8	1665.7	1668.4
30°	224.8	318.9	762.7	1316.0	1552.3	1606.1	1619.6	1636.8	1658.0	1663.7
32.5°	209.4	289.7	739.7	1317.5	1536.9	1576.9	1595.0	1627.6	1658.0	1666.8
35°	188.3	245.9	701.2	1306.4	1502.4	1529.3	1567.7	1621.5	1661.8	1671.4
37.5°	167.5	214.4	649.0	1283.7	1457.0	1485.1	1548.5	1613.4	1658.4	1670.3
40°	153.7	196.0	609.0	1262.2	1421.7	1454.3	1533.1	1604.2	1652.2	1665.7
42.5°	142.9	180.6	566.0	1234.5	1381.7	1426.7	1514.7	1590.4	1635.3	1645.7
45°	128.7	157.5	497.6	1183.4	1319.8	1387.1	1483.1	1556.2	1598.4	1609.9
47.5°	115.3	141.4	426.1	1125.0	1256.8	1339.1	1437.4	1506.6	1545.4	1553.1
50°	107.6	130.6	378.5	1083.5	1212.3	1300.6	1400.5	1469.7	1502.4	1510.0
52.5°	101.4	121.4	333.9	1035.9	1166.2	1260.7	1356.0	1419.0	1448.6	1451.6
55°	92.2	109.5	274.7	962.5	1093.2	1191.1	1283.3	1333.3	1354.4	1362.1
57.5°	87.2	100.7	228.2	883.0	1010.9	1109.3	1193.1	1231.9	1248.8	1251.5
60°	82.6	96.1	203.6	826.1	958.7	1050.9	1123.9	1156.5	1171.9	1177.7
62.5°	78.0	93.0	185.2	767.7	897.2	986.3	1050.1	1078.2	1090.5	1091.6
65°	73.0	88.4	163.3	678.2	801.1	883.7	933.7	956.7	962.5	966.4
67.5°	68.0	83.8	147.5	587.9	702.0	770.4	807.3	827.3	828.4	836.5
70°	63.4	80.7	138.3	526.4	628.2	693.5	724.3	739.7	737.7	739.7
72.5°	60.3	76.1	132.2	463.4	557.5	609.0	636.7	647.4	648.6	649.0
75°	53.8	67.2	123.0	366.9	441.9	486.1	507.2	505.3	511.0	513.0
77.5°	46.5	58.0	101.1	270.5	331.2	360.4	377.3	382.7	380.8	381.2
80°	40.3	51.9	82.6	207.5	257.4	280.5	295.9	299.7	297.8	299.7
82.5°	32.7	42.7	64.2	153.7	192.9	211.3	222.1	222.9	224.0	227.5
85°	19.2	25.0	38.4	84.5	107.6	117.2	124.9	126.8	128.7	128.7
87.5°	7.7	10.8	20.0	35.3	44.6	47.6	47.6	44.6	47.6	43.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)