

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-940-1D-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-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

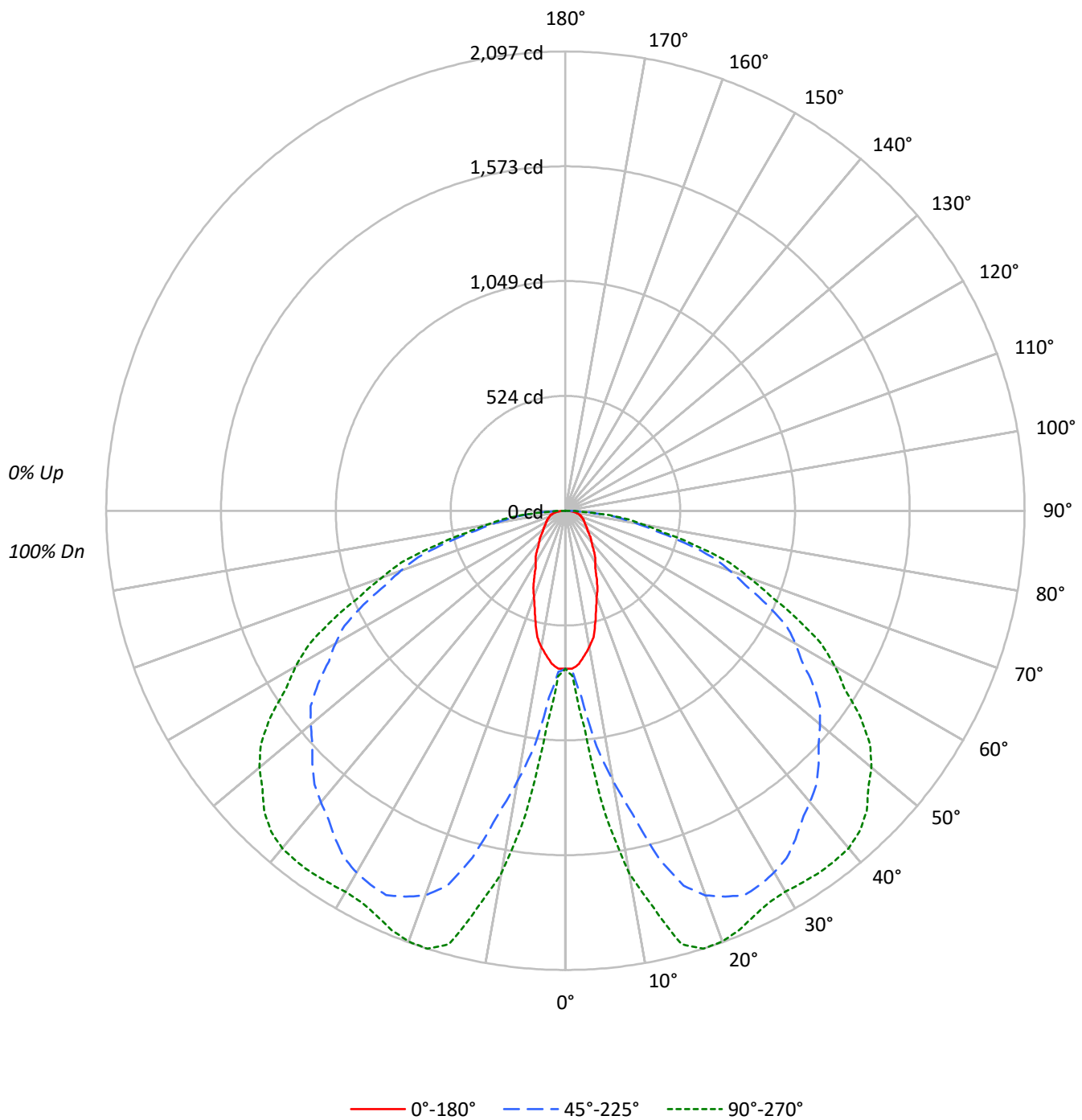
Lumens per Lamp: N/A
Luminaire Lumens: 5585.2 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 71.7
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°	3329	3329	3329
5°	3256	3960	4610
10°	2957	5859	7870
15°	2516	7830	9786
20°	2051	9176	10276
25°	1713	9857	10383
30°	1446	10161	10705
35°	1281	10311	11370
40°	1118	10460	12116
45°	1014	10666	12687
50°	933	10892	13090
55°	896	11096	13233
60°	921	11198	13124
65°	963	11108	12742
70°	1033	10767	12050
75°	1159	9988	11044
80°	1294	8631	9617
85°	1228	7188	8231

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13287 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	1.7
10°-20°	412.3	7.4
20°-30°	722.5	12.9
30°-40°	930.3	16.7
40°-50°	1038.7	18.6
50°-60°	996.1	17.8
60°-70°	792.7	14.2
70°-80°	467.0	8.4
80°-90°	130.9	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°	1229.5	22.0
0°-40°	2159.8	38.7
0°-60°	4194.6	75.1
0°-90°	5585.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5585.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	703	754	855	965	996	65
15°	527	968	1640	1982	2049	146
25°	336	1098	1936	2036	2040	155
35°	227	1030	1831	1942	2019	142
45°	156	808	1635	1858	1945	120
55°	111	540	1380	1595	1645	102
65°	88	353	1018	1149	1167	87
75°	65	222	560	611	620	68
85°	23	60	136	153	156	26
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	721.7	721.7	721.7	721.7	721.7	721.7	721.7	721.7	721.7	721.7
2.5°	721.7	721.7	725.4	731.0	732.8	740.3	751.4	757.0	760.7	757.0
5°	703.1	712.4	742.6	786.7	830.8	879.5	942.2	972.3	990.9	995.5
7.5°	666.5	692.0	777.9	893.0	1021.1	1148.2	1258.2	1347.3	1399.3	1401.6
10°	631.2	675.3	807.6	983.9	1160.3	1341.3	1492.1	1585.0	1659.2	1680.1
12.5°	592.2	658.6	839.1	1074.9	1316.2	1519.5	1687.1	1789.2	1848.6	1856.5
15°	526.8	624.2	884.1	1218.3	1517.7	1761.3	1921.4	2002.7	2039.8	2049.1
17.5°	466.0	593.6	923.6	1330.6	1685.2	1904.7	2026.3	2077.4	2096.0	2096.9
20°	417.7	563.9	942.2	1408.6	1770.6	1967.9	2056.0	2088.5	2097.8	2093.2
22.5°	382.4	532.3	953.3	1460.6	1822.6	1992.0	2057.9	2073.7	2077.4	2072.8
25°	336.5	480.4	953.8	1529.3	1875.0	1998.0	2032.8	2037.5	2042.1	2039.8
27.5°	295.6	422.3	939.8	1574.8	1882.5	1969.7	1986.0	1997.6	2012.0	2015.2
30°	271.5	385.2	921.3	1589.6	1875.0	1940.0	1956.3	1977.1	2002.7	2009.6
32.5°	252.9	349.9	893.4	1591.5	1856.5	1904.7	1926.6	1966.0	2002.7	2013.3
35°	227.4	297.0	847.0	1578.0	1814.7	1847.2	1893.6	1958.6	2007.3	2018.9
37.5°	202.4	259.0	783.9	1550.6	1759.9	1793.8	1870.4	1948.8	2003.1	2017.5
40°	185.6	236.7	735.6	1524.6	1717.2	1756.7	1851.8	1937.7	1995.7	2012.0
42.5°	172.7	218.1	683.6	1491.2	1669.0	1723.3	1829.6	1921.0	1975.3	1987.8
45°	155.5	190.3	601.0	1429.5	1594.2	1675.5	1791.5	1879.7	1930.7	1944.7
47.5°	139.2	170.8	514.7	1358.9	1518.1	1617.5	1736.3	1819.8	1866.7	1876.0
50°	130.0	157.8	457.2	1308.8	1464.3	1571.0	1691.7	1775.3	1814.7	1824.0
52.5°	122.5	146.7	403.3	1251.3	1408.6	1522.8	1637.9	1714.0	1749.7	1753.4
55°	111.4	132.3	331.8	1162.6	1320.4	1438.8	1550.2	1610.5	1636.0	1645.3
57.5°	105.4	121.6	275.7	1066.5	1221.1	1339.9	1441.1	1488.0	1508.4	1511.6
60°	99.8	116.0	246.0	997.9	1158.0	1269.4	1357.5	1397.0	1415.6	1422.5
62.5°	94.2	112.3	223.7	927.3	1083.7	1191.4	1268.4	1302.3	1317.2	1318.6
65°	88.2	106.7	197.3	819.2	967.7	1067.5	1127.8	1155.7	1162.6	1167.3
67.5°	82.1	101.2	178.2	710.1	847.9	930.6	975.1	999.2	1000.6	1010.4
70°	76.6	97.5	167.1	635.8	758.8	837.7	874.9	893.4	891.1	893.4
72.5°	72.9	91.9	159.7	559.7	673.4	735.6	769.0	782.0	783.4	783.9
75°	65.0	81.2	148.5	443.2	533.7	587.1	612.6	610.3	617.3	619.6
77.5°	56.2	70.1	122.1	326.7	400.1	435.3	455.8	462.3	459.9	460.4
80°	48.7	62.7	99.8	250.6	311.0	338.8	357.4	362.0	359.7	362.0
82.5°	39.5	51.5	77.5	185.6	233.0	255.3	268.3	269.2	270.6	274.8
85°	23.2	30.2	46.4	102.1	130.0	141.6	150.8	153.2	155.5	155.5
87.5°	9.3	13.0	24.1	42.7	53.8	57.6	57.6	53.8	57.6	52.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)