

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-840-1D-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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

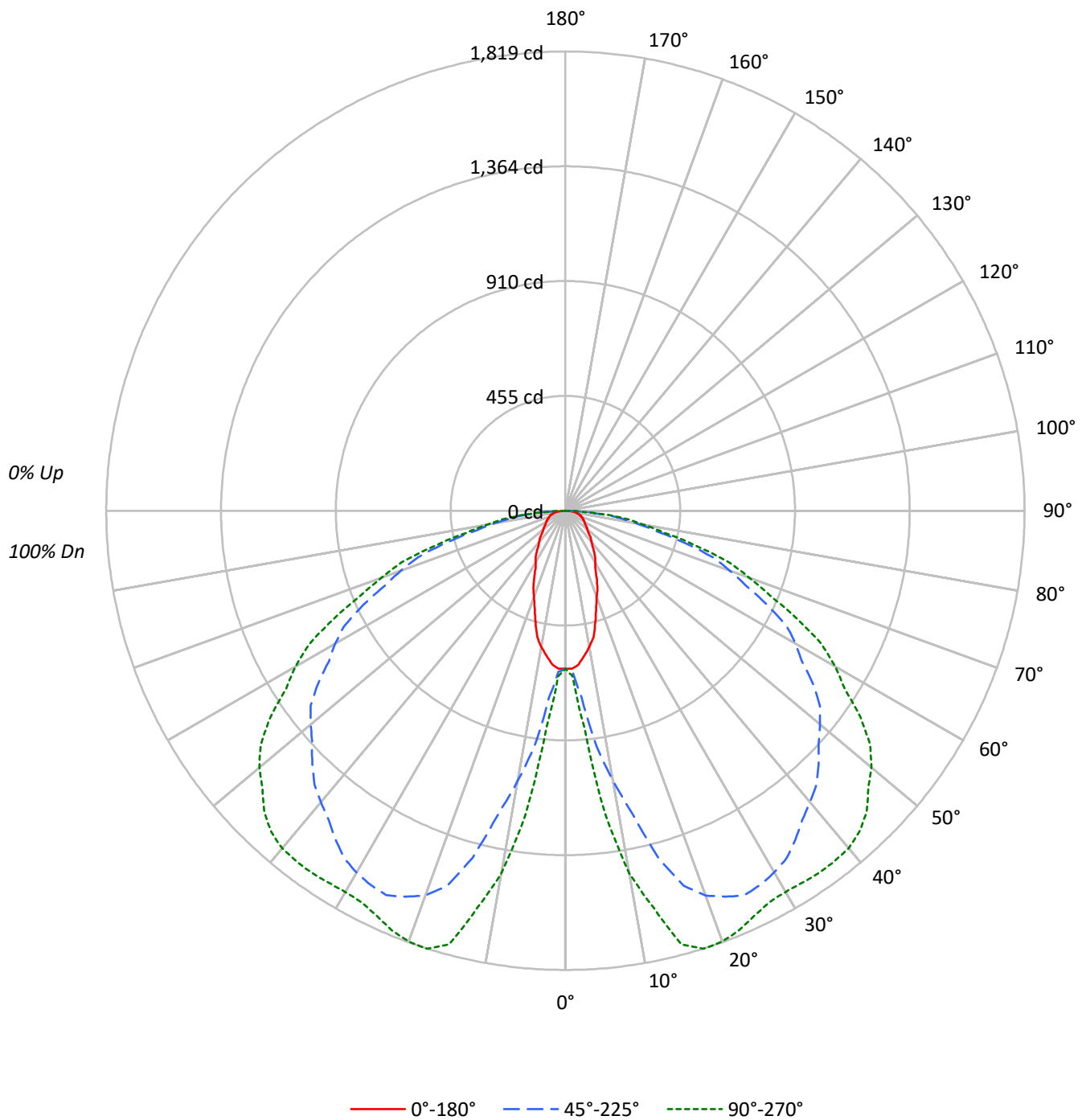
Lumens per Lamp: N/A
Luminaire Lumens: 4845.6 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-100D-840-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-100D-840-1D-UNV-STD-W-6

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°	3851	3851	3851
5°	3766	4581	5333
10°	3420	6778	9104
15°	2910	9058	11320
20°	2372	10615	11887
25°	1981	11402	12010
30°	1673	11754	12383
35°	1481	11928	13152
40°	1294	12100	14015
45°	1173	12338	14675
50°	1078	12599	15142
55°	1036	12835	15307
60°	1065	12953	15181
65°	1113	12848	14739
70°	1194	12455	13939
75°	1340	11556	12774
80°	1498	9983	11126
85°	1419	8310	9520

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 15370 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-100D-840-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.1	1.7
10°-20°	357.7	7.4
20°-30°	626.8	12.9
30°-40°	807.1	16.7
40°-50°	901.2	18.6
50°-60°	864.2	17.8
60°-70°	687.7	14.2
70°-80°	405.2	8.4
80°-90°	113.6	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°	1066.7	22.0
0°-40°	1873.8	38.7
0°-60°	3639.1	75.1
0°-90°	4845.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4845.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	610	654	742	837	864	56
15°	457	840	1422	1720	1778	127
25°	292	952	1680	1767	1770	135
35°	197	893	1588	1685	1752	123
45°	135	701	1418	1612	1687	104
55°	97	468	1197	1384	1427	88
65°	76	306	883	997	1013	76
75°	56	193	486	530	538	59
85°	20	52	118	132	135	23
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-100D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	626.1	626.1	626.1	626.1	626.1	626.1	626.1	626.1	626.1	626.1
2.5°	626.1	626.1	629.4	634.2	635.8	642.2	651.9	656.7	660.0	656.7
5°	610.0	618.1	644.3	682.5	720.8	763.0	817.4	843.6	859.7	863.7
7.5°	578.2	600.4	674.9	774.7	885.8	996.2	1091.6	1168.9	1214.0	1216.0
10°	547.6	585.9	700.6	853.6	1006.6	1163.7	1294.5	1375.1	1439.5	1457.6
12.5°	513.8	571.4	728.0	932.6	1141.9	1318.3	1463.7	1552.2	1603.8	1610.6
15°	457.0	541.6	767.1	1057.0	1316.7	1528.1	1667.0	1737.5	1769.7	1777.7
17.5°	404.3	515.0	801.3	1154.4	1462.0	1652.5	1758.0	1802.3	1818.4	1819.2
20°	362.4	489.2	817.4	1222.1	1536.1	1707.3	1783.8	1812.0	1820.0	1816.0
22.5°	331.8	461.8	827.1	1267.2	1581.2	1728.2	1785.4	1799.1	1802.3	1798.3
25°	291.9	416.7	827.5	1326.8	1626.7	1733.4	1763.6	1767.7	1771.7	1769.7
27.5°	256.5	366.4	815.4	1366.2	1633.2	1708.9	1723.0	1733.0	1745.5	1748.3
30°	235.6	334.2	799.3	1379.1	1626.7	1683.1	1697.2	1715.3	1737.5	1743.5
32.5°	219.4	303.6	775.1	1380.7	1610.6	1652.5	1671.4	1705.7	1737.5	1746.7
35°	197.3	257.7	734.8	1369.0	1574.4	1602.6	1642.8	1699.2	1741.5	1751.6
37.5°	175.6	224.7	680.1	1345.3	1526.9	1556.3	1622.7	1690.8	1737.9	1750.3
40°	161.1	205.4	638.2	1322.7	1489.8	1524.1	1606.6	1681.1	1731.4	1745.5
42.5°	149.8	189.2	593.1	1293.7	1448.0	1495.1	1587.3	1666.6	1713.7	1724.6
45°	134.9	165.1	521.4	1240.2	1383.1	1453.6	1554.3	1630.8	1675.1	1687.1
47.5°	120.8	148.2	446.5	1179.0	1317.1	1403.3	1506.3	1578.8	1619.5	1627.5
50°	112.7	136.9	396.6	1135.5	1270.4	1363.0	1467.7	1540.2	1574.4	1582.4
52.5°	106.3	127.2	349.9	1085.6	1222.1	1321.1	1421.0	1487.0	1518.0	1521.2
55°	96.6	114.8	287.9	1008.7	1145.6	1248.2	1344.9	1397.2	1419.4	1427.4
57.5°	91.4	105.5	239.2	925.3	1059.4	1162.5	1250.2	1290.9	1308.6	1311.5
60°	86.6	100.7	213.4	865.7	1004.6	1101.3	1177.8	1212.0	1228.1	1234.1
62.5°	81.7	97.4	194.1	804.5	940.2	1033.6	1100.5	1129.9	1142.7	1143.9
65°	76.5	92.6	171.1	710.7	839.5	926.1	978.5	1002.6	1008.7	1012.7
67.5°	71.3	87.8	154.6	616.1	735.7	807.3	846.0	866.9	868.1	876.6
70°	66.4	84.6	145.0	551.6	658.3	726.8	759.0	775.1	773.1	775.1
72.5°	63.2	79.7	138.5	485.6	584.3	638.2	667.2	678.5	679.7	680.1
75°	56.4	70.5	128.9	384.5	463.1	509.4	531.5	529.5	535.5	537.5
77.5°	48.7	60.8	105.9	283.5	347.1	377.7	395.4	401.0	399.0	399.4
80°	42.3	54.4	86.6	217.4	269.8	293.9	310.0	314.1	312.1	314.1
82.5°	34.2	44.7	67.2	161.1	202.1	221.5	232.7	233.5	234.7	238.4
85°	20.1	26.2	40.3	88.6	112.7	122.8	130.9	132.9	134.9	134.9
87.5°	8.1	11.3	20.9	37.0	46.7	49.9	49.9	46.7	49.9	45.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)