

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-935-1D-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-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

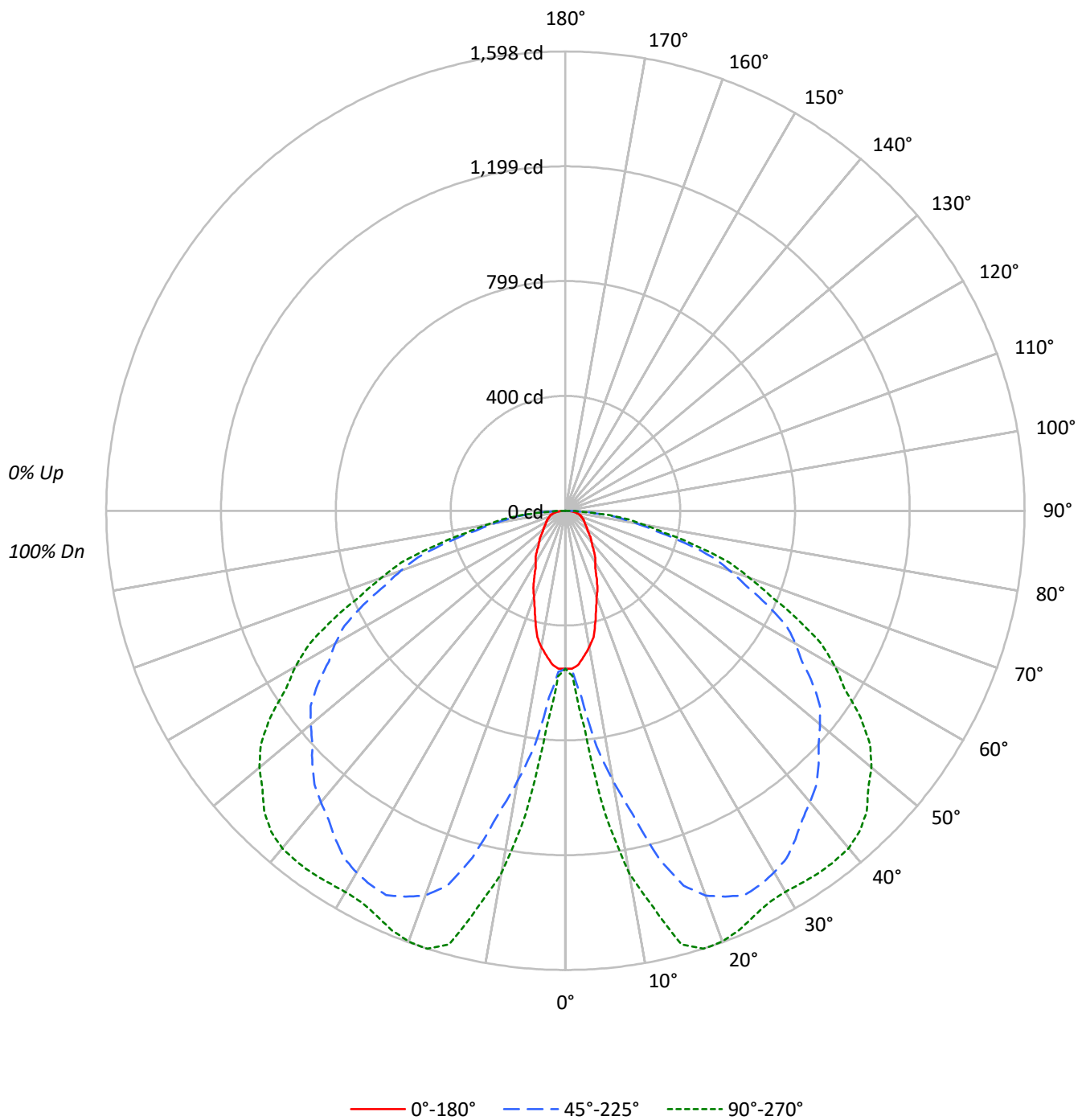
Lumens per Lamp: N/A
Luminaire Lumens: 4256.5 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-935-1D-UNV-STD-W-12

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-935-1D-UNV-STD-W-12

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°	1691	1691	1691
5°	1654	2012	2342
10°	1502	2977	3998
15°	1278	3978	4972
20°	1042	4662	5221
25°	870	5008	5275
30°	735	5163	5439
35°	651	5239	5776
40°	568	5314	6156
45°	515	5419	6446
50°	474	5534	6651
55°	455	5637	6723
60°	467	5689	6668
65°	489	5643	6474
70°	525	5470	6123
75°	588	5075	5611
80°	657	4385	4886
85°	625	3650	4181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6751 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-935-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	1.7
10°-20°	314.2	7.4
20°-30°	550.6	12.9
30°-40°	709.0	16.7
40°-50°	791.6	18.6
50°-60°	759.1	17.8
60°-70°	604.1	14.2
70°-80°	355.9	8.4
80°-90°	99.8	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°	937.0	22.0
0°-40°	1646.0	38.7
0°-60°	3196.7	75.1
0°-90°	4256.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4256.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	536	574	652	735	759	49
15°	402	737	1249	1511	1562	111
25°	256	837	1476	1552	1554	118
35°	173	785	1395	1480	1539	108
45°	118	616	1246	1416	1482	92
55°	85	411	1051	1216	1254	77
65°	67	269	776	875	890	67
75°	50	169	427	466	472	52
85°	18	46	103	116	118	20
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	550.0	550.0	550.0	550.0	550.0	550.0	550.0	550.0	550.0	550.0
2.5°	550.0	550.0	552.8	557.1	558.5	564.2	572.6	576.9	579.7	576.9
5°	535.9	542.9	565.9	599.5	633.1	670.3	718.0	741.0	755.2	758.7
7.5°	507.9	527.4	592.8	680.5	778.2	875.1	958.9	1026.8	1066.4	1068.2
10°	481.0	514.6	615.4	749.9	884.3	1022.2	1137.2	1207.9	1264.5	1280.4
12.5°	451.3	501.9	639.5	819.2	1003.1	1158.0	1285.7	1363.5	1408.8	1414.8
15°	401.5	475.7	673.8	928.5	1156.6	1342.3	1464.3	1526.2	1554.5	1561.6
17.5°	355.1	452.4	703.9	1014.1	1284.3	1451.6	1544.3	1583.2	1597.3	1598.0
20°	318.3	429.8	718.0	1073.5	1349.4	1499.7	1566.9	1591.7	1598.7	1595.2
22.5°	291.5	405.7	726.5	1113.1	1389.0	1518.1	1568.3	1580.4	1583.2	1579.6
25°	256.4	366.1	726.9	1165.5	1429.0	1522.7	1549.2	1552.8	1556.3	1554.5
27.5°	225.3	321.9	716.3	1200.1	1434.6	1501.1	1513.5	1522.3	1533.3	1535.8
30°	206.9	293.6	702.1	1211.4	1429.0	1478.5	1490.9	1506.8	1526.2	1531.5
32.5°	192.8	266.7	680.9	1212.9	1414.8	1451.6	1468.2	1498.3	1526.2	1534.4
35°	173.3	226.4	645.5	1202.6	1383.0	1407.7	1443.1	1492.6	1529.8	1538.6
37.5°	154.2	197.4	597.4	1181.7	1341.2	1367.1	1425.4	1485.2	1526.6	1537.6
40°	141.5	180.4	560.6	1161.9	1308.7	1338.8	1411.3	1476.7	1520.9	1533.3
42.5°	131.6	166.2	521.0	1136.5	1271.9	1313.3	1394.3	1464.0	1505.4	1514.9
45°	118.5	145.0	458.0	1089.4	1215.0	1276.9	1365.3	1432.5	1471.4	1482.0
47.5°	106.1	130.2	392.3	1035.6	1157.0	1232.7	1323.2	1386.9	1422.6	1429.7
50°	99.0	120.3	348.4	997.4	1115.9	1197.3	1289.3	1352.9	1383.0	1390.1
52.5°	93.4	111.8	307.4	953.6	1073.5	1160.5	1248.2	1306.2	1333.5	1336.3
55°	84.9	100.8	252.9	886.0	1006.3	1096.5	1181.4	1227.4	1246.8	1253.9
57.5°	80.3	92.7	210.1	812.8	930.6	1021.1	1098.3	1134.0	1149.5	1152.0
60°	76.0	88.4	187.5	760.5	882.5	967.4	1034.6	1064.7	1078.8	1084.1
62.5°	71.8	85.6	170.5	706.7	825.9	908.0	966.7	992.5	1003.8	1004.9
65°	67.2	81.4	150.3	624.3	737.5	813.5	859.5	880.7	886.0	889.6
67.5°	62.6	77.1	135.8	541.2	646.2	709.2	743.1	761.5	762.6	770.0
70°	58.4	74.3	127.3	484.6	578.3	638.4	666.7	680.9	679.1	680.9
72.5°	55.5	70.0	121.7	426.6	513.2	560.6	586.1	596.0	597.1	597.4
75°	49.5	61.9	113.2	337.8	406.8	447.4	466.9	465.1	470.4	472.2
77.5°	42.8	53.4	93.0	249.0	304.9	331.8	347.3	352.3	350.5	350.9
80°	37.1	47.8	76.0	191.0	237.0	258.2	272.4	275.9	274.1	275.9
82.5°	30.1	39.3	59.1	141.5	177.6	194.5	204.4	205.1	206.2	209.4
85°	17.7	23.0	35.4	77.8	99.0	107.9	115.0	116.7	118.5	118.5
87.5°	7.1	9.9	18.4	32.5	41.0	43.9	43.9	41.0	43.9	39.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)