

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-940-1D-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-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

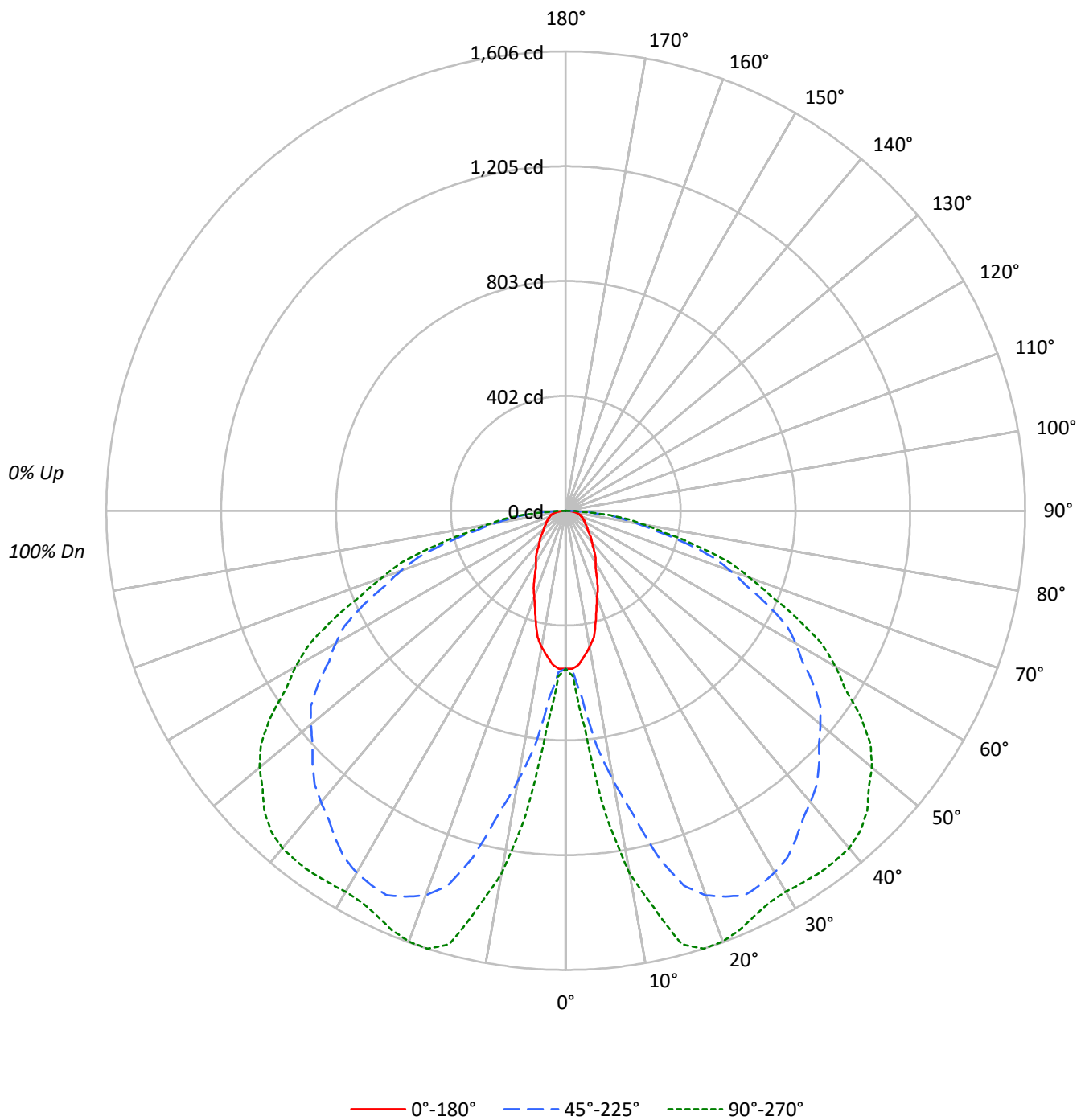
Lumens per Lamp: N/A
Luminaire Lumens: 4277.5 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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°	1700	1700	1700
5°	1662	2022	2354
10°	1510	2992	4018
15°	1284	3998	4996
20°	1047	4685	5247
25°	874	5033	5301
30°	738	5188	5466
35°	654	5265	5805
40°	571	5341	6186
45°	518	5446	6477
50°	476	5561	6683
55°	457	5665	6756
60°	470	5717	6701
65°	491	5671	6506
70°	527	5498	6152
75°	592	5100	5638
80°	661	4407	4911
85°	628	3668	4203

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.5	1.7
10°-20°	315.8	7.4
20°-30°	553.3	12.9
30°-40°	712.5	16.7
40°-50°	795.5	18.6
50°-60°	762.9	17.8
60°-70°	607.1	14.2
70°-80°	357.7	8.4
80°-90°	100.3	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°	941.6	22.0
0°-40°	1654.1	38.7
0°-60°	3212.5	75.1
0°-90°	4277.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4277.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	538	577	655	739	762	49
15°	403	741	1256	1518	1569	112
25°	258	841	1483	1560	1562	119
35°	174	789	1402	1488	1546	109
45°	119	619	1252	1423	1489	92
55°	85	413	1057	1222	1260	78
65°	68	270	779	880	894	67
75°	50	170	429	468	474	52
85°	18	46	104	117	119	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	552.7	552.7	552.7	552.7	552.7	552.7	552.7	552.7	552.7	552.7
2.5°	552.7	552.7	555.6	559.8	561.3	566.9	575.5	579.7	582.6	579.7
5°	538.5	545.6	568.7	602.5	636.3	673.6	721.6	744.7	758.9	762.4
7.5°	510.4	530.0	595.7	683.9	782.0	879.4	963.6	1031.9	1071.7	1073.5
10°	483.4	517.2	618.5	753.6	888.6	1027.3	1142.8	1213.9	1270.7	1286.7
12.5°	453.6	504.4	642.7	823.2	1008.1	1163.7	1292.1	1370.3	1415.8	1421.8
15°	403.4	478.1	677.1	933.1	1162.3	1348.9	1471.6	1533.8	1562.2	1569.3
17.5°	356.9	454.6	707.3	1019.1	1290.6	1458.8	1551.9	1591.0	1605.2	1605.9
20°	319.9	431.9	721.6	1078.8	1356.0	1507.1	1574.6	1599.5	1606.6	1603.1
22.5°	292.9	407.7	730.1	1118.6	1395.9	1525.6	1576.1	1588.2	1591.0	1587.4
25°	257.7	367.9	730.5	1171.2	1436.0	1530.2	1556.9	1560.4	1564.0	1562.2
27.5°	226.4	323.5	719.8	1206.0	1441.7	1508.5	1521.0	1529.9	1540.9	1543.4
30°	207.9	295.0	705.6	1217.4	1436.0	1485.8	1498.2	1514.2	1533.8	1539.1
32.5°	193.7	268.0	684.2	1218.8	1421.8	1458.8	1475.5	1505.7	1533.8	1541.9
35°	174.2	227.5	648.7	1208.5	1389.8	1414.7	1450.2	1500.0	1537.3	1546.2
37.5°	155.0	198.3	600.4	1187.6	1347.9	1373.8	1432.5	1492.5	1534.1	1545.1
40°	142.2	181.3	563.4	1167.7	1315.2	1345.4	1418.2	1484.0	1528.4	1540.9
42.5°	132.2	167.1	523.6	1142.1	1278.2	1319.8	1401.2	1471.2	1512.8	1522.4
45°	119.1	145.7	460.3	1094.8	1221.0	1283.2	1372.0	1439.6	1478.7	1489.3
47.5°	106.6	130.8	394.2	1040.8	1162.7	1238.7	1329.7	1393.7	1429.6	1436.7
50°	99.5	120.9	350.1	1002.4	1121.4	1203.2	1295.6	1359.6	1389.8	1396.9
52.5°	93.8	112.3	308.9	958.3	1078.8	1166.2	1254.4	1312.7	1340.0	1342.9
55°	85.3	101.3	254.1	890.4	1011.3	1101.9	1187.2	1233.4	1253.0	1260.1
57.5°	80.7	93.1	211.1	816.8	935.2	1026.2	1103.7	1139.6	1155.2	1157.7
60°	76.4	88.9	188.4	764.2	886.8	972.2	1039.7	1069.9	1084.1	1089.5
62.5°	72.2	86.0	171.3	710.2	830.0	912.4	971.4	997.4	1008.8	1009.8
65°	67.5	81.8	151.1	627.4	741.1	817.5	863.7	885.1	890.4	894.0
67.5°	62.9	77.5	136.5	543.8	649.4	712.7	746.8	765.3	766.4	773.8
70°	58.6	74.6	128.0	487.0	581.2	641.6	670.0	684.2	682.5	684.2
72.5°	55.8	70.4	122.3	428.7	515.8	563.4	589.0	598.9	600.0	600.4
75°	49.8	62.2	113.7	339.5	408.8	449.6	469.2	467.4	472.7	474.5
77.5°	43.0	53.7	93.5	250.2	306.4	333.4	349.1	354.0	352.3	352.6
80°	37.3	48.0	76.4	191.9	238.2	259.5	273.7	277.3	275.5	277.3
82.5°	30.2	39.5	59.4	142.2	178.4	195.5	205.5	206.2	207.2	210.4
85°	17.8	23.1	35.5	78.2	99.5	108.4	115.5	117.3	119.1	119.1
87.5°	7.1	10.0	18.5	32.7	41.2	44.1	44.1	41.2	44.1	39.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)