

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-075D-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-075D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

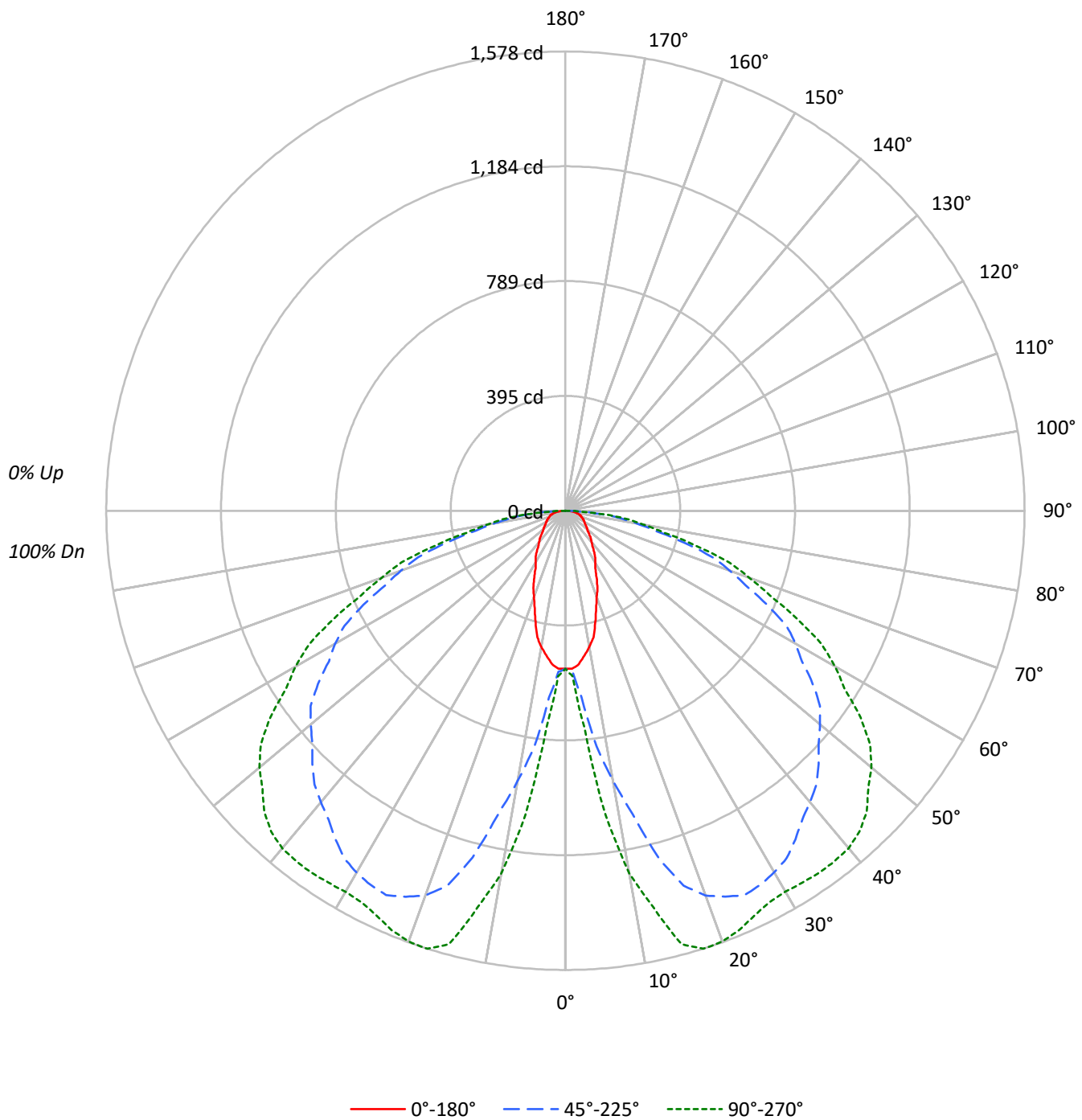
Lumens per Lamp: N/A
Luminaire Lumens: 4203.1 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 54.4
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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2505	2505	2505
5°	2450	2980	3469
10°	2225	4409	5923
15°	1893	5892	7364
20°	1543	6906	7733
25°	1289	7418	7813
30°	1088	7647	8056
35°	964	7760	8556
40°	841	7872	9118
45°	763	8026	9547
50°	702	8197	9851
55°	674	8350	9958
60°	693	8427	9877
65°	725	8359	9588
70°	777	8103	9068
75°	872	7517	8311
80°	975	6495	7237
85°	926	5407	6193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 9999 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	1.7
10°-20°	310.3	7.4
20°-30°	543.7	12.9
30°-40°	700.1	16.7
40°-50°	781.7	18.6
50°-60°	749.6	17.8
60°-70°	596.5	14.2
70°-80°	351.5	8.4
80°-90°	98.5	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°	925.2	22.0
0°-40°	1625.4	38.7
0°-60°	3156.6	75.1
0°-90°	4203.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	543	543	543	543	543	
5°	529	567	644	726	749	49
15°	396	728	1234	1492	1542	110
25°	253	826	1457	1532	1535	117
35°	171	775	1378	1462	1519	107
45°	117	608	1230	1398	1463	91
55°	84	406	1038	1201	1238	76
65°	66	265	766	864	878	66
75°	49	167	422	460	466	51
85°	18	45	102	115	117	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°	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1
2.5°	543.1	543.1	545.9	550.1	551.5	557.1	565.5	569.7	572.5	569.7
5°	529.1	536.1	558.8	592.0	625.2	661.9	709.0	731.7	745.7	749.2
7.5°	501.6	520.8	585.4	672.0	768.4	864.1	946.9	1013.9	1053.1	1054.8
10°	475.0	508.2	607.7	740.5	873.2	1009.4	1122.9	1192.8	1248.6	1264.4
12.5°	445.7	495.6	631.5	808.9	990.5	1143.5	1269.6	1346.4	1391.1	1397.1
15°	396.4	469.8	665.4	916.8	1142.1	1325.5	1446.0	1507.1	1535.0	1542.0
17.5°	350.7	446.7	695.0	1001.4	1268.2	1433.4	1524.9	1563.3	1577.3	1578.0
20°	314.3	424.4	709.0	1060.0	1332.5	1480.9	1547.3	1571.7	1578.7	1575.2
22.5°	287.8	400.6	717.4	1099.2	1371.6	1499.1	1548.7	1560.5	1563.3	1559.8
25°	253.2	361.5	717.8	1150.8	1411.1	1503.6	1529.8	1533.3	1536.8	1535.0
27.5°	222.5	317.8	707.3	1185.1	1416.6	1482.3	1494.5	1503.3	1514.1	1516.5
30°	204.3	289.9	693.3	1196.3	1411.1	1460.0	1472.2	1487.9	1507.1	1512.3
32.5°	190.4	263.4	672.3	1197.7	1397.1	1433.4	1449.8	1479.5	1507.1	1515.1
35°	171.1	223.5	637.4	1187.5	1365.7	1390.1	1425.0	1473.9	1510.6	1519.3
37.5°	152.3	194.9	589.9	1166.9	1324.4	1349.9	1407.6	1466.6	1507.5	1518.3
40°	139.7	178.1	553.6	1147.4	1292.3	1322.0	1393.6	1458.2	1501.9	1514.1
42.5°	129.9	164.2	514.5	1122.2	1256.0	1296.8	1376.8	1445.6	1486.5	1495.9
45°	117.0	143.2	452.3	1075.8	1199.7	1260.9	1348.2	1414.5	1453.0	1463.4
47.5°	104.8	128.5	387.3	1022.7	1142.5	1217.2	1306.6	1369.5	1404.8	1411.8
50°	97.8	118.8	344.0	984.9	1102.0	1182.3	1273.1	1336.0	1365.7	1372.6
52.5°	92.2	110.4	303.5	941.6	1060.0	1146.0	1232.6	1289.9	1316.8	1319.5
55°	83.8	99.5	249.7	874.9	993.7	1082.7	1166.6	1212.0	1231.2	1238.2
57.5°	79.3	91.5	207.5	802.6	918.9	1008.3	1084.5	1119.8	1135.1	1137.6
60°	75.1	87.3	185.1	750.9	871.4	955.3	1021.6	1051.3	1065.3	1070.5
62.5°	70.9	84.5	168.3	697.8	815.5	896.6	954.6	980.1	991.2	992.3
65°	66.4	80.3	148.4	616.5	728.2	803.3	848.7	869.7	874.9	878.4
67.5°	61.8	76.1	134.1	534.4	638.1	700.3	733.8	752.0	753.0	760.4
70°	57.6	73.3	125.7	478.5	571.1	630.4	658.4	672.3	670.6	672.3
72.5°	54.8	69.2	120.1	421.2	506.8	553.6	578.7	588.5	589.6	589.9
75°	48.9	61.1	111.8	333.6	401.7	441.8	461.0	459.3	464.5	466.3
77.5°	42.3	52.7	91.9	245.9	301.1	327.6	343.0	347.9	346.1	346.5
80°	36.7	47.2	75.1	188.6	234.0	255.0	268.9	272.4	270.7	272.4
82.5°	29.7	38.8	58.3	139.7	175.3	192.1	201.9	202.6	203.6	206.8
85°	17.5	22.7	34.9	76.8	97.8	106.5	113.5	115.3	117.0	117.0
87.5°	7.0	9.8	18.2	32.1	40.5	43.3	43.3	40.5	43.3	39.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)