

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-935-1D-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-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

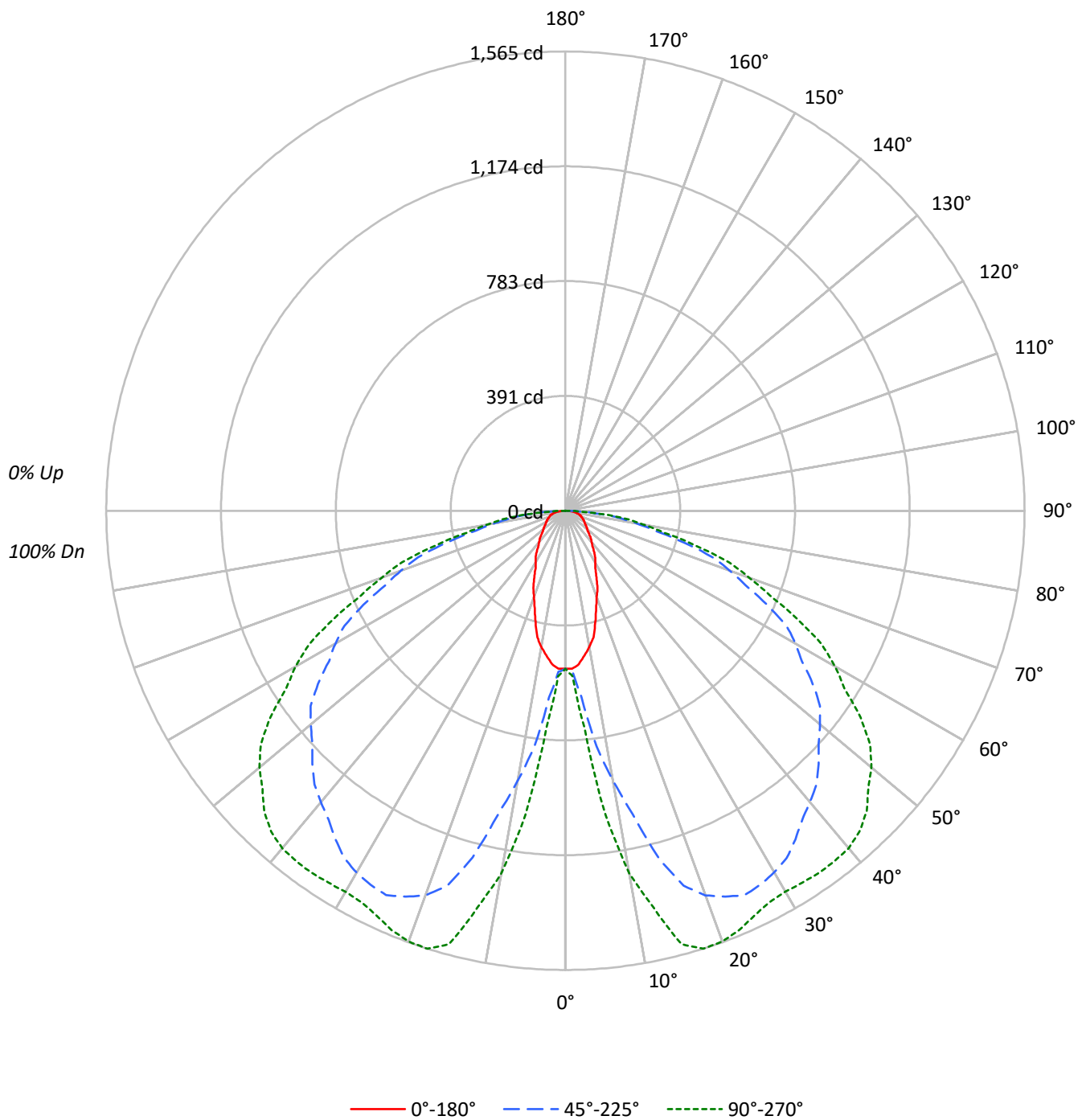
Lumens per Lamp: N/A
Luminaire Lumens: 4168.3 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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

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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°	3313	3313	3313
5°	3240	3940	4588
10°	2942	5830	7831
15°	2503	7792	9738
20°	2040	9131	10225
25°	1704	9809	10331
30°	1439	10111	10652
35°	1274	10260	11314
40°	1113	10408	12057
45°	1009	10613	12624
50°	928	10838	13026
55°	891	11042	13168
60°	916	11142	13061
65°	958	11053	12678
70°	1029	10714	11992
75°	1153	9940	10989
80°	1289	8590	9571
85°	1221	7149	8186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13222 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	1.7
10°-20°	307.7	7.4
20°-30°	539.2	12.9
30°-40°	694.3	16.7
40°-50°	775.2	18.6
50°-60°	743.4	17.8
60°-70°	591.6	14.2
70°-80°	348.5	8.4
80°-90°	97.7	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°	917.6	22.0
0°-40°	1611.9	38.7
0°-60°	3130.5	75.1
0°-90°	4168.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4168.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	539	539	539	539	539	
5°	525	562	638	720	743	48
15°	393	722	1224	1479	1529	109
25°	251	819	1445	1520	1522	116
35°	170	768	1366	1450	1507	106
45°	116	603	1220	1386	1451	90
55°	83	403	1030	1191	1228	76
65°	66	263	759	857	871	65
75°	48	166	418	456	462	51
85°	17	45	101	114	116	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°	538.6	538.6	538.6	538.6	538.6	538.6	538.6	538.6	538.6	538.6
2.5°	538.6	538.6	541.4	545.5	546.9	552.5	560.8	564.9	567.7	564.9
5°	524.8	531.7	554.2	587.1	620.0	656.4	703.2	725.7	739.5	743.0
7.5°	497.4	516.5	580.5	666.4	762.0	856.9	939.0	1005.5	1044.3	1046.1
10°	471.1	504.0	602.7	734.3	865.9	1001.0	1113.6	1182.9	1238.3	1253.9
12.5°	442.0	491.5	626.3	802.2	982.3	1134.0	1259.1	1335.3	1379.6	1385.5
15°	393.1	465.9	659.9	909.2	1132.7	1314.5	1434.0	1494.6	1522.3	1529.3
17.5°	347.8	443.0	689.3	993.1	1257.7	1421.5	1512.3	1550.4	1564.3	1564.9
20°	311.7	420.9	703.2	1051.3	1321.4	1468.7	1534.5	1558.7	1565.6	1562.2
22.5°	285.4	397.3	711.5	1090.1	1360.2	1486.7	1535.8	1547.6	1550.4	1546.9
25°	251.1	358.5	711.8	1141.3	1399.4	1491.2	1517.1	1520.6	1524.1	1522.3
27.5°	220.6	315.2	701.4	1175.3	1404.9	1470.0	1482.2	1490.8	1501.6	1504.0
30°	202.6	287.5	687.6	1186.4	1399.4	1447.9	1460.0	1475.6	1494.6	1499.8
32.5°	188.8	261.2	666.8	1187.7	1385.5	1421.5	1437.8	1467.3	1494.6	1502.6
35°	169.7	221.7	632.1	1177.7	1354.3	1378.6	1413.2	1461.7	1498.1	1506.8
37.5°	151.0	193.3	585.0	1157.3	1313.5	1338.8	1395.9	1454.4	1495.0	1505.7
40°	138.6	176.7	549.0	1137.9	1281.6	1311.0	1382.1	1446.1	1489.4	1501.6
42.5°	128.9	162.8	510.2	1112.9	1245.6	1286.1	1365.4	1433.7	1474.2	1483.5
45°	116.0	142.0	448.6	1066.8	1189.8	1250.4	1337.0	1402.8	1440.9	1451.3
47.5°	103.9	127.5	384.1	1014.2	1133.0	1207.1	1295.8	1358.2	1393.1	1400.1
50°	97.0	117.8	341.2	976.8	1092.8	1172.5	1262.6	1324.9	1354.3	1361.3
52.5°	91.4	109.5	301.0	933.8	1051.3	1136.5	1222.4	1279.2	1305.9	1308.6
55°	83.1	98.7	247.7	867.7	985.5	1073.8	1156.9	1201.9	1221.0	1227.9
57.5°	78.6	90.8	205.7	796.0	911.3	1000.0	1075.5	1110.5	1125.7	1128.2
60°	74.5	86.6	183.6	744.7	864.2	947.3	1013.2	1042.6	1056.5	1061.7
62.5°	70.3	83.8	167.0	692.1	808.8	889.2	946.7	971.9	983.0	984.1
65°	65.8	79.7	147.2	611.4	722.2	796.7	841.7	862.5	867.7	871.1
67.5°	61.3	75.5	133.0	530.0	632.8	694.5	727.7	745.8	746.8	754.1
70°	57.2	72.7	124.7	474.5	566.3	625.2	652.9	666.8	665.0	666.8
72.5°	54.4	68.6	119.2	417.7	502.6	549.0	574.0	583.6	584.7	585.0
75°	48.5	60.6	110.8	330.8	398.3	438.2	457.2	455.5	460.7	462.4
77.5°	41.9	52.3	91.1	243.9	298.6	324.9	340.1	345.0	343.3	343.6
80°	36.4	46.8	74.5	187.0	232.1	252.9	266.7	270.2	268.4	270.2
82.5°	29.4	38.4	57.8	138.6	173.9	190.5	200.2	200.9	201.9	205.1
85°	17.3	22.5	34.6	76.2	97.0	105.6	112.6	114.3	116.0	116.0
87.5°	6.9	9.7	18.0	31.9	40.2	43.0	43.0	40.2	43.0	38.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)