

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-125D-940-1D-UNV-STD-W-4

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-125D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

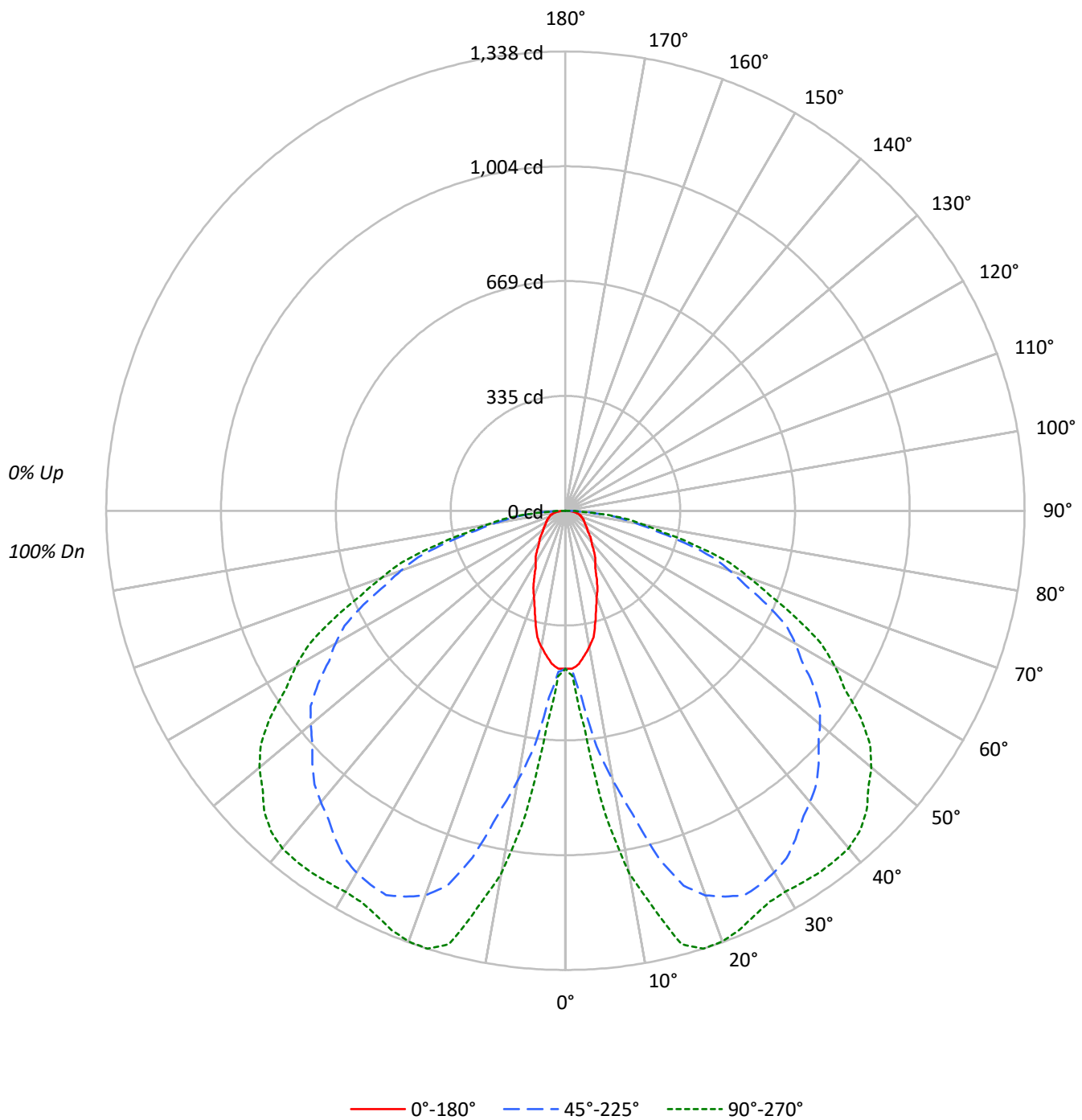
Lumens per Lamp: N/A
Luminaire Lumens: 3563.5 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.6
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°	4249	4249	4249
5°	4155	5053	5883
10°	3773	7477	10042
15°	3210	9992	12488
20°	2617	11709	13112
25°	2186	12578	13248
30°	1845	12966	13660
35°	1634	13158	14508
40°	1426	13347	15461
45°	1294	13610	16188
50°	1190	13899	16703
55°	1144	14159	16885
60°	1175	14289	16747
65°	1229	14174	16258
70°	1319	13740	15376
75°	1479	12746	14091
80°	1652	11014	12273
85°	1567	9167	10501

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 16955 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	1.7
10°-20°	263.1	7.4
20°-30°	461.0	12.9
30°-40°	593.6	16.7
40°-50°	662.7	18.6
50°-60°	635.5	17.8
60°-70°	505.8	14.2
70°-80°	298.0	8.4
80°-90°	83.5	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°	784.4	22.0
0°-40°	1378.0	38.7
0°-60°	2676.3	75.1
0°-90°	3563.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3563.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	449	481	546	616	635	41
15°	336	617	1046	1265	1307	93
25°	215	700	1236	1299	1301	99
35°	145	657	1168	1239	1288	91
45°	99	516	1043	1185	1241	77
55°	71	344	880	1018	1050	65
65°	56	225	649	733	745	56
75°	42	142	358	390	395	43
85°	15	38	87	97	99	17
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	460.5	460.5	460.5	460.5	460.5	460.5	460.5	460.5	460.5	460.5
2.5°	460.5	460.5	462.8	466.4	467.6	472.3	479.4	483.0	485.3	483.0
5°	448.6	454.5	473.8	501.9	530.1	561.1	601.1	620.4	632.2	635.2
7.5°	425.2	441.5	496.3	569.7	651.5	732.6	802.8	859.6	892.8	894.3
10°	402.7	430.9	515.2	627.8	740.3	855.8	952.0	1011.2	1058.6	1071.9
12.5°	377.8	420.2	535.4	685.8	839.8	969.5	1076.4	1141.5	1179.4	1184.5
15°	336.1	398.3	564.1	777.3	968.3	1123.8	1225.9	1277.8	1301.4	1307.4
17.5°	297.3	378.7	589.3	849.0	1075.2	1215.3	1292.9	1325.4	1337.3	1337.9
20°	266.5	359.8	601.1	898.7	1129.7	1255.5	1311.8	1332.5	1338.5	1335.5
22.5°	244.0	339.6	608.2	931.9	1162.9	1270.9	1313.0	1323.1	1325.4	1322.5
25°	214.7	306.5	608.5	975.7	1196.3	1274.8	1297.0	1300.0	1302.9	1301.4
27.5°	188.6	269.5	599.6	1004.7	1201.1	1256.7	1267.1	1274.5	1283.7	1285.7
30°	173.2	245.8	587.8	1014.2	1196.3	1237.8	1248.1	1261.5	1277.8	1282.2
32.5°	161.4	223.3	570.0	1015.4	1184.5	1215.3	1229.2	1254.4	1277.8	1284.6
35°	145.1	189.5	540.4	1006.8	1157.8	1178.6	1208.2	1249.6	1280.7	1288.1
37.5°	129.1	165.2	500.1	989.3	1122.9	1144.5	1193.4	1243.4	1278.0	1287.2
40°	118.4	151.0	469.3	972.7	1095.6	1120.8	1181.5	1236.3	1273.3	1283.7
42.5°	110.2	139.2	436.2	951.4	1064.8	1099.5	1167.3	1225.6	1260.3	1268.3
45°	99.2	121.4	383.5	912.0	1017.2	1069.0	1143.0	1199.3	1231.9	1240.7
47.5°	88.8	109.0	328.4	867.0	968.6	1032.0	1107.8	1161.1	1191.0	1196.9
50°	82.9	100.7	291.7	835.1	934.3	1002.4	1079.4	1132.7	1157.8	1163.7
52.5°	78.2	93.6	257.3	798.3	898.7	971.6	1045.0	1093.6	1116.4	1118.7
55°	71.1	84.4	211.7	741.8	842.5	918.0	989.0	1027.5	1043.8	1049.7
57.5°	67.2	77.6	175.9	680.5	779.1	854.9	919.4	949.4	962.4	964.5
60°	63.7	74.0	156.9	636.7	738.8	809.9	866.1	891.3	903.2	907.6
62.5°	60.1	71.7	142.7	591.6	691.4	760.1	809.3	830.9	840.4	841.3
65°	56.3	68.1	125.9	522.6	617.4	681.1	719.6	737.3	741.8	744.7
67.5°	52.4	64.6	113.7	453.1	541.0	593.7	622.1	637.5	638.4	644.6
70°	48.9	62.2	106.6	405.7	484.2	534.5	558.2	570.0	568.5	570.0
72.5°	46.5	58.6	101.9	357.1	429.7	469.3	490.7	499.0	499.8	500.1
75°	41.5	51.8	94.8	282.8	340.5	374.6	390.9	389.4	393.8	395.3
77.5°	35.8	44.7	77.9	208.5	255.3	277.8	290.8	294.9	293.5	293.7
80°	31.1	40.0	63.7	159.9	198.4	216.2	228.0	231.0	229.5	231.0
82.5°	25.2	32.9	49.5	118.4	148.7	162.9	171.2	171.7	172.6	175.3
85°	14.8	19.2	29.6	65.1	82.9	90.3	96.2	97.7	99.2	99.2
87.5°	5.9	8.3	15.4	27.2	34.3	36.7	36.7	34.3	36.7	33.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)