

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-927-1D-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-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

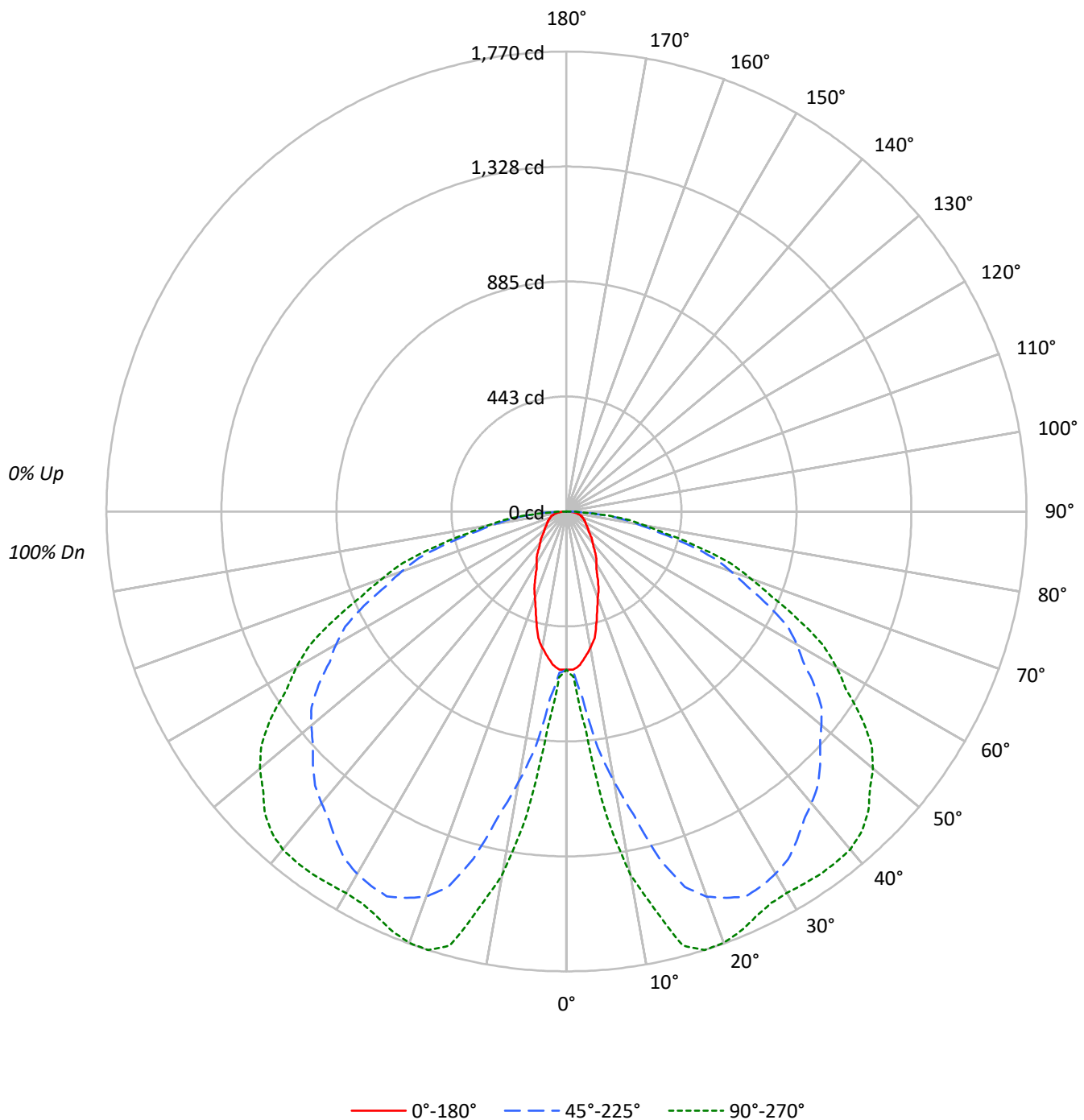
Lumens per Lamp: N/A
Luminaire Lumens: 4713.6 lumens
Efficiency: N/A
Efficacy: 67.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82		
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67		
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57	55		
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48	46		
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41	39		
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36	34		
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31	29		
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28	26		
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3746	3746	3746
5°	3664	4456	5188
10°	3327	6593	8856
15°	2831	8811	11012
20°	2307	10326	11563
25°	1927	11091	11683
30°	1627	11434	12046
35°	1441	11603	12794
40°	1258	11770	13634
45°	1141	12002	14276
50°	1050	12256	14729
55°	1008	12485	14890
60°	1036	12601	14768
65°	1083	12499	14337
70°	1162	12116	13560
75°	1302	11240	12427
80°	1456	9711	10821
85°	1383	8088	9259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 14952 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	1.7
10°-20°	348.0	7.4
20°-30°	609.8	12.9
30°-40°	785.1	16.7
40°-50°	876.6	18.6
50°-60°	840.6	17.8
60°-70°	669.0	14.2
70°-80°	394.1	8.4
80°-90°	110.5	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°	1037.6	22.0
0°-40°	1822.8	38.7
0°-60°	3540.0	75.1
0°-90°	4713.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4713.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	609	609	609	609	609	
5°	593	636	722	814	840	55
15°	445	817	1384	1673	1729	123
25°	284	926	1634	1719	1722	131
35°	192	869	1545	1639	1704	120
45°	131	682	1380	1568	1641	102
55°	94	455	1164	1346	1388	86
65°	74	298	859	969	985	74
75°	55	188	473	516	523	57
85°	20	51	115	129	131	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	609.1	609.1	609.1	609.1	609.1	609.1	609.1	609.1	609.1	609.1
2.5°	609.1	609.1	612.2	616.9	618.5	624.7	634.1	638.8	642.0	638.8
5°	593.4	601.2	626.7	663.9	701.1	742.3	795.1	820.6	836.3	840.2
7.5°	562.5	584.0	656.5	753.6	861.7	969.0	1061.9	1137.1	1180.9	1182.9
10°	532.7	569.9	681.5	830.4	979.2	1132.0	1259.3	1337.6	1400.3	1417.9
12.5°	499.8	555.8	708.2	907.2	1110.8	1282.4	1423.8	1510.0	1560.1	1566.8
15°	444.6	526.8	746.2	1028.2	1280.8	1486.5	1621.6	1690.1	1721.5	1729.3
17.5°	393.3	501.0	779.5	1123.0	1422.2	1607.5	1710.1	1753.2	1768.9	1769.7
20°	352.5	475.9	795.1	1188.8	1494.3	1660.8	1735.2	1762.6	1770.4	1766.5
22.5°	322.8	449.3	804.5	1232.6	1538.2	1681.1	1736.8	1750.1	1753.2	1749.3
25°	284.0	405.4	804.9	1290.6	1582.4	1686.2	1715.6	1719.5	1723.4	1721.5
27.5°	249.5	356.4	793.2	1329.0	1588.7	1662.3	1676.0	1685.8	1698.0	1700.7
30°	229.1	325.1	777.5	1341.5	1582.4	1637.3	1651.0	1668.6	1690.1	1696.0
32.5°	213.5	295.3	754.0	1343.1	1566.8	1607.5	1625.9	1659.2	1690.1	1699.2
35°	191.9	250.7	714.8	1331.7	1531.5	1558.9	1598.1	1652.9	1694.1	1703.9
37.5°	170.8	218.6	661.6	1308.6	1485.3	1513.9	1578.5	1644.7	1690.5	1702.7
40°	156.7	199.8	620.8	1286.7	1449.3	1482.5	1562.8	1635.3	1684.3	1698.0
42.5°	145.7	184.1	577.0	1258.5	1408.5	1454.3	1544.0	1621.2	1667.0	1677.6
45°	131.2	160.6	507.2	1206.4	1345.5	1414.0	1511.9	1586.3	1629.4	1641.2
47.5°	117.5	144.1	434.4	1146.9	1281.2	1365.0	1465.3	1535.8	1575.4	1583.2
50°	109.7	133.2	385.8	1104.6	1235.8	1325.9	1427.7	1498.2	1531.5	1539.3
52.5°	103.4	123.8	340.4	1056.0	1188.8	1285.1	1382.3	1446.5	1476.7	1479.8
55°	94.0	111.6	280.1	981.2	1114.4	1214.2	1308.2	1359.2	1380.7	1388.5
57.5°	88.9	102.6	232.7	900.1	1030.5	1130.8	1216.2	1255.8	1273.0	1275.7
60°	84.2	97.9	207.6	842.1	977.3	1071.3	1145.7	1179.0	1194.7	1200.5
62.5°	79.5	94.8	188.8	782.6	914.6	1005.5	1070.5	1099.1	1111.6	1112.8
65°	74.4	90.1	166.5	691.3	816.7	900.9	951.8	975.3	981.2	985.1
67.5°	69.3	85.4	150.4	599.3	715.6	785.3	822.9	843.3	844.5	852.7
70°	64.6	82.3	141.0	536.6	640.4	707.0	738.3	754.0	752.0	754.0
72.5°	61.5	77.6	134.7	472.4	568.3	620.8	649.0	660.0	661.2	661.6
75°	54.8	68.5	125.3	374.1	450.4	495.5	517.0	515.1	520.9	522.9
77.5°	47.4	59.1	103.0	275.7	337.6	367.4	384.6	390.1	388.2	388.6
80°	41.1	52.9	84.2	211.5	262.4	285.9	301.6	305.5	303.6	305.5
82.5°	33.3	43.5	65.4	156.7	196.6	215.4	226.4	227.2	228.4	231.9
85°	19.6	25.5	39.2	86.2	109.7	119.5	127.3	129.3	131.2	131.2
87.5°	7.8	11.0	20.4	36.0	45.4	48.6	48.6	45.4	48.6	43.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)