

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-830-1D-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-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

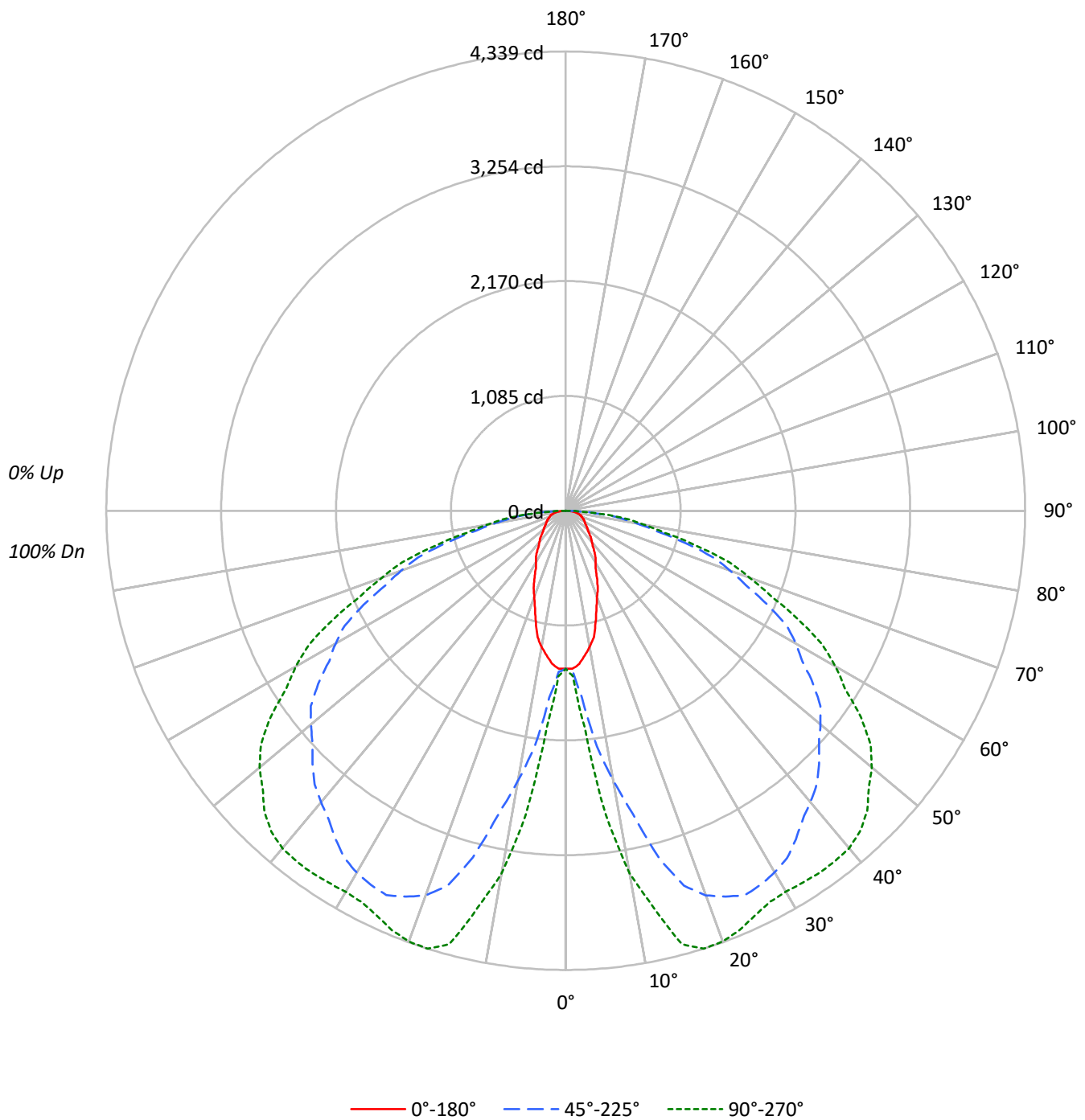
Lumens per Lamp: N/A
Luminaire Lumens: 11556.3 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 140.8
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°	4592	4592	4592
5°	4491	5462	6359
10°	4078	8082	10856
15°	3470	10801	13499
20°	2829	12658	14174
25°	2362	13597	14322
30°	1995	14016	14766
35°	1766	14223	15683
40°	1542	14428	16713
45°	1399	14712	17500
50°	1287	15024	18057
55°	1236	15305	18253
60°	1270	15446	18104
65°	1328	15321	17575
70°	1424	14852	16622
75°	1597	13778	15233
80°	1785	11905	13265
85°	1694	9912	11352

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 18328 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.9	1.7
10°-20°	853.1	7.4
20°-30°	1494.9	12.9
30°-40°	1924.9	16.7
40°-50°	2149.2	18.6
50°-60°	2060.9	17.8
60°-70°	1640.2	14.2
70°-80°	966.3	8.4
80°-90°	270.9	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°	2543.9	22.0
0°-40°	4468.8	38.7
0°-60°	8678.9	75.1
0°-90°	11556.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11556.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1493	1493	1493	1493	1493	
5°	1455	1559	1769	1996	2060	134
15°	1090	2002	3392	4102	4240	302
25°	696	2271	4007	4213	4220	321
35°	470	2131	3788	4019	4177	294
45°	322	1672	3383	3844	4024	249
55°	230	1116	2854	3301	3404	210
65°	182	730	2105	2377	2415	181
75°	134	460	1160	1264	1282	140
85°	48	125	281	316	322	54
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3
2.5°	1493.3	1493.3	1500.9	1512.5	1516.3	1531.7	1554.7	1566.2	1573.9	1566.2
5°	1454.8	1474.1	1536.5	1627.7	1718.9	1819.8	1949.4	2011.8	2050.2	2059.8
7.5°	1379.0	1431.8	1609.5	1847.6	2112.7	2375.8	2603.4	2787.7	2895.3	2900.1
10°	1306.0	1397.2	1670.9	2035.8	2400.7	2775.3	3087.4	3279.4	3433.1	3476.3
12.5°	1225.3	1362.7	1736.2	2224.0	2723.4	3144.0	3490.7	3701.9	3824.9	3841.2
15°	1089.9	1291.6	1829.4	2520.8	3140.2	3644.3	3975.6	4143.7	4220.5	4239.7
17.5°	964.1	1228.2	1911.0	2753.2	3486.8	3941.1	4192.7	4298.3	4336.7	4338.6
20°	864.3	1166.8	1949.4	2914.5	3663.5	4071.7	4254.1	4321.3	4340.5	4330.9
22.5°	791.3	1101.5	1972.4	3022.1	3771.1	4121.6	4258.0	4290.6	4298.3	4288.7
25°	696.2	993.9	1973.4	3164.2	3879.6	4134.1	4206.1	4215.7	4225.3	4220.5
27.5°	611.7	873.9	1944.6	3258.3	3895.0	4075.5	4109.1	4133.1	4162.9	4169.6
30°	561.8	797.0	1906.2	3289.0	3879.6	4014.0	4047.7	4090.9	4143.7	4158.1
32.5°	523.4	724.1	1848.6	3292.9	3841.2	3941.1	3986.2	4067.8	4143.7	4165.8
35°	470.5	614.6	1752.5	3265.0	3754.8	3822.0	3918.0	4052.5	4153.3	4177.3
37.5°	418.7	535.8	1621.9	3208.4	3641.4	3711.5	3870.0	4032.3	4144.6	4174.4
40°	384.1	489.8	1522.1	3154.6	3553.1	3634.7	3831.6	4009.2	4129.3	4162.9
42.5°	357.2	451.3	1414.5	3085.4	3453.2	3565.6	3785.5	3974.7	4087.0	4113.0
45°	321.7	393.7	1243.6	2957.7	3298.6	3466.7	3706.7	3889.2	3994.8	4023.6
47.5°	288.1	353.4	1065.0	2811.7	3141.1	3346.6	3592.5	3765.3	3862.3	3881.5
50°	268.9	326.5	945.9	2708.0	3029.7	3250.6	3500.3	3673.1	3754.8	3774.0
52.5°	253.5	303.5	834.5	2589.0	2914.5	3150.7	3388.9	3546.4	3620.3	3628.0
55°	230.5	273.7	686.6	2405.5	2732.0	2976.9	3207.4	3332.2	3385.0	3404.3
57.5°	218.0	251.6	570.4	2206.8	2526.5	2772.4	2981.7	3078.7	3121.0	3127.7
60°	206.5	240.1	509.0	2064.6	2395.9	2626.4	2808.9	2890.5	2928.9	2943.3
62.5°	194.9	232.4	462.9	1918.7	2242.3	2465.1	2624.5	2694.6	2725.3	2728.2
65°	182.5	220.9	408.1	1694.9	2002.2	2208.7	2333.5	2391.1	2405.5	2415.1
67.5°	170.0	209.3	368.8	1469.3	1754.5	1925.4	2017.6	2067.5	2070.4	2090.6
70°	158.4	201.7	345.7	1315.6	1570.1	1733.3	1810.2	1848.6	1843.8	1848.6
72.5°	150.8	190.1	330.3	1158.1	1393.4	1522.1	1591.2	1618.1	1621.0	1621.9
75°	134.4	168.1	307.3	917.1	1104.3	1214.8	1267.6	1262.8	1277.2	1282.0
77.5°	116.2	145.0	252.6	676.0	827.8	900.8	943.0	956.5	951.7	952.6
80°	100.8	129.6	206.5	518.6	643.4	701.0	739.4	749.0	744.2	749.0
82.5°	81.6	106.6	160.4	384.1	482.1	528.2	555.1	557.0	559.9	568.5
85°	48.0	62.4	96.0	211.3	268.9	292.9	312.1	316.9	321.7	321.7
87.5°	19.2	26.9	49.9	88.3	111.4	119.1	119.1	111.4	119.1	107.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)