

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-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-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

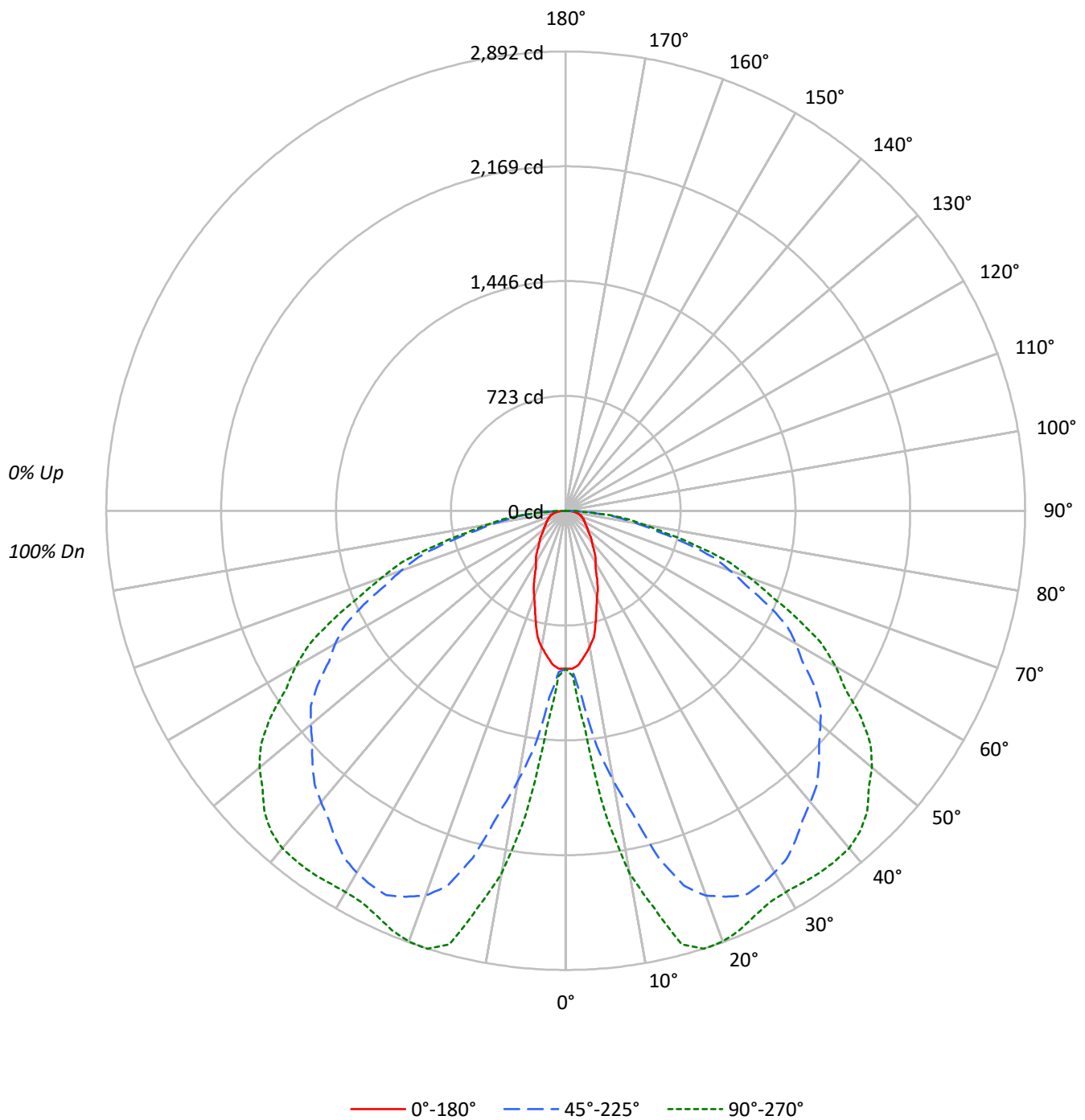
Lumens per Lamp: N/A
Luminaire Lumens: 7704.2 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 91.1
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°	4079	8082	10856
15°	3470	10801	13499
20°	2829	12658	14174
25°	2362	13597	14322
30°	1995	14016	14766
35°	1767	14223	15683
40°	1542	14428	16713
45°	1399	14712	17500
50°	1287	15024	18057
55°	1235	15305	18253
60°	1270	15446	18104
65°	1327	15322	17575
70°	1424	14852	16622
75°	1597	13779	15234
80°	1785	11904	13267
85°	1694	9914	11353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 18329 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	1.7
10°-20°	568.7	7.4
20°-30°	996.6	12.9
30°-40°	1283.3	16.7
40°-50°	1432.8	18.6
50°-60°	1374.0	17.8
60°-70°	1093.4	14.2
70°-80°	644.2	8.4
80°-90°	180.6	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°	1695.9	22.0
0°-40°	2979.2	38.7
0°-60°	5786.0	75.1
0°-90°	7704.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7704.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	970	1040	1180	1331	1373	89
15°	727	1335	2262	2734	2826	202
25°	464	1514	2671	2809	2814	214
35°	314	1420	2526	2679	2785	196
45°	214	1115	2255	2562	2682	166
55°	154	744	1903	2201	2270	140
65°	122	487	1404	1584	1610	121
75°	90	307	773	843	855	93
85°	32	83	187	210	214	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5
2.5°	995.5	995.5	1000.6	1008.3	1010.9	1021.1	1036.5	1044.2	1049.3	1044.2
5°	969.9	982.7	1024.3	1085.1	1146.0	1213.2	1299.6	1341.2	1366.8	1373.2
7.5°	919.3	954.5	1073.0	1231.7	1408.4	1583.8	1735.6	1858.5	1930.2	1933.4
10°	870.7	931.5	1113.9	1357.2	1600.5	1850.2	2058.2	2186.3	2288.7	2317.5
12.5°	816.9	908.4	1157.5	1482.7	1815.6	2096.0	2327.1	2468.0	2549.9	2560.8
15°	726.6	861.1	1219.6	1680.5	2093.4	2429.6	2650.4	2762.5	2813.7	2826.5
17.5°	642.8	818.8	1274.0	1835.4	2324.6	2627.4	2795.1	2865.5	2891.1	2892.4
20°	576.2	777.8	1299.6	1943.0	2442.4	2714.4	2836.1	2880.9	2893.7	2887.3
22.5°	527.5	734.3	1315.0	2014.7	2514.1	2747.7	2838.6	2860.4	2865.5	2859.1
25°	464.1	662.6	1315.6	2109.5	2586.4	2756.1	2804.1	2810.5	2816.9	2813.7
27.5°	407.8	582.6	1296.4	2172.2	2596.6	2717.0	2739.4	2755.4	2775.3	2779.7
30°	374.5	531.4	1270.8	2192.7	2586.4	2676.0	2698.4	2727.2	2762.5	2772.1
32.5°	348.9	482.7	1232.4	2195.2	2560.8	2627.4	2657.5	2711.9	2762.5	2777.2
35°	313.7	409.7	1168.4	2176.7	2503.2	2548.0	2612.0	2701.6	2768.9	2784.9
37.5°	279.1	357.2	1081.3	2138.9	2427.6	2474.4	2580.0	2688.2	2763.1	2782.9
40°	256.1	326.5	1014.7	2103.0	2368.7	2423.1	2554.4	2672.8	2752.9	2775.3
42.5°	238.2	300.9	943.0	2057.0	2302.2	2377.1	2523.7	2649.8	2724.7	2742.0
45°	214.5	262.5	829.1	1971.8	2199.1	2311.1	2471.2	2592.8	2663.2	2682.4
47.5°	192.1	235.6	710.0	1874.5	2094.1	2231.1	2395.0	2510.2	2574.9	2587.7
50°	179.3	217.7	630.6	1805.4	2019.8	2167.1	2333.5	2448.8	2503.2	2516.0
52.5°	169.0	202.3	556.3	1726.0	1943.0	2100.5	2259.3	2364.3	2413.5	2418.7
55°	153.6	182.5	457.7	1603.7	1821.4	1984.6	2138.3	2221.5	2256.7	2269.5
57.5°	145.3	167.7	380.3	1471.2	1684.4	1848.3	1987.8	2052.5	2080.6	2085.1
60°	137.6	160.0	339.3	1376.4	1597.3	1750.9	1872.6	1927.0	1952.6	1962.2
62.5°	130.0	154.9	308.6	1279.1	1494.9	1643.4	1749.7	1796.4	1816.9	1818.8
65°	121.6	147.2	272.1	1129.9	1334.8	1472.5	1555.7	1594.1	1603.7	1610.1
67.5°	113.3	139.6	245.8	979.5	1169.6	1283.6	1345.1	1378.3	1380.3	1393.7
70°	105.6	134.4	230.5	877.1	1046.7	1155.6	1206.8	1232.4	1229.2	1232.4
72.5°	100.5	126.8	220.2	772.1	928.9	1014.7	1060.8	1078.7	1080.7	1081.3
75°	89.6	112.0	204.9	611.4	736.2	809.9	845.1	841.9	851.5	854.7
77.5°	77.5	96.7	168.4	450.7	551.9	600.5	628.7	637.6	634.4	635.1
80°	67.2	86.4	137.6	345.7	428.9	467.3	493.0	499.4	496.2	499.4
82.5°	54.4	71.1	106.9	256.1	321.4	352.1	370.0	371.3	373.2	379.0
85°	32.0	41.6	64.0	140.8	179.3	195.3	208.1	211.3	214.5	214.5
87.5°	12.8	17.9	33.3	58.9	74.3	79.4	79.4	74.3	79.4	71.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)