

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-835-1D-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-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

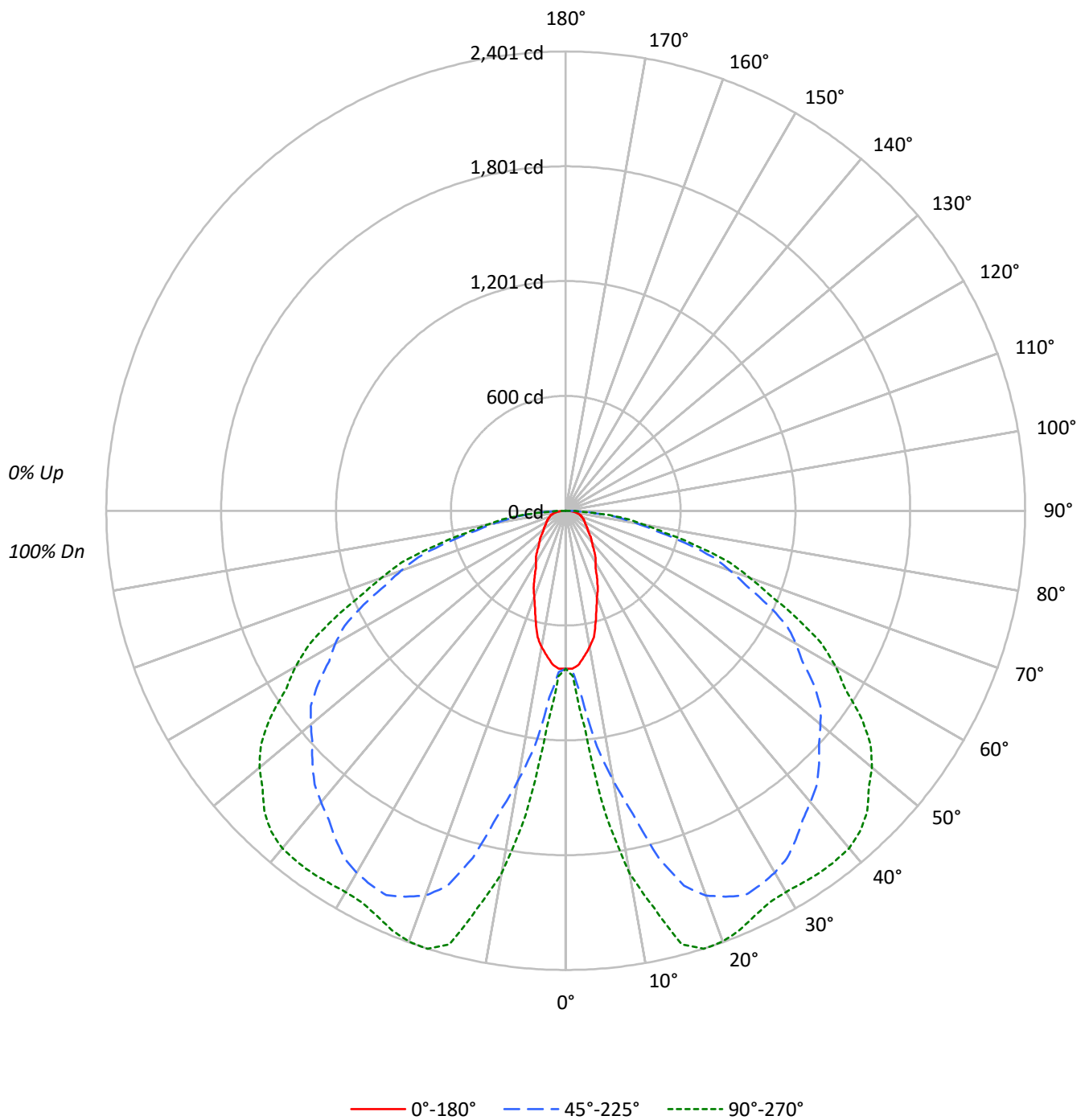
Lumens per Lamp: N/A
Luminaire Lumens: 6396.4 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 71.7
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	0
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°	3813	3813	3813
5°	3729	4535	5279
10°	3386	6710	9013
15°	2881	8967	11207
20°	2349	10509	11768
25°	1962	11289	11891
30°	1656	11637	12260
35°	1466	11809	13021
40°	1280	11979	13876
45°	1162	12215	14529
50°	1068	12474	14991
55°	1026	12707	15155
60°	1055	12824	15030
65°	1102	12720	14592
70°	1183	12331	13801
75°	1326	11440	12648
80°	1482	9884	11014
85°	1408	8228	9427

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 15217 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	1.7
10°-20°	472.2	7.4
20°-30°	827.5	12.9
30°-40°	1065.5	16.7
40°-50°	1189.6	18.6
50°-60°	1140.7	17.8
60°-70°	907.8	14.2
70°-80°	534.8	8.4
80°-90°	149.9	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°	1408.0	22.0
0°-40°	2473.5	38.7
0°-60°	4803.8	75.1
0°-90°	6396.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6396.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	805	863	979	1105	1140	74
15°	603	1108	1878	2270	2347	167
25°	385	1257	2218	2332	2336	178
35°	260	1179	2097	2224	2312	163
45°	178	926	1872	2127	2227	138
55°	128	618	1580	1827	1884	116
65°	101	404	1165	1316	1337	100
75°	74	254	642	700	710	78
85°	27	69	155	175	178	30
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5
2.5°	826.5	826.5	830.8	837.2	839.3	847.8	860.5	866.9	871.2	866.9
5°	805.3	815.9	850.4	900.9	951.4	1007.2	1079.0	1113.5	1134.8	1140.1
7.5°	763.3	792.5	890.8	1022.7	1169.4	1315.0	1441.0	1543.0	1602.6	1605.2
10°	722.9	773.4	924.9	1126.8	1328.8	1536.1	1708.9	1815.2	1900.2	1924.1
12.5°	678.2	754.2	961.0	1231.0	1507.4	1740.2	1932.1	2049.0	2117.1	2126.1
15°	603.3	714.9	1012.6	1395.3	1738.1	2017.1	2200.5	2293.5	2336.1	2346.7
17.5°	533.7	679.8	1057.7	1523.9	1930.0	2181.4	2320.6	2379.1	2400.4	2401.4
20°	478.4	645.8	1079.0	1613.2	2027.8	2253.7	2354.7	2391.9	2402.5	2397.2
22.5°	438.0	609.7	1091.8	1672.7	2087.3	2281.3	2356.8	2374.9	2379.1	2373.8
25°	385.4	550.1	1092.3	1751.4	2147.4	2288.2	2328.1	2333.4	2338.7	2336.1
27.5°	338.6	483.7	1076.3	1803.5	2155.9	2255.8	2274.4	2287.7	2304.2	2307.9
30°	310.9	441.2	1055.1	1820.5	2147.4	2221.8	2240.4	2264.3	2293.5	2301.5
32.5°	289.7	400.8	1023.2	1822.6	2126.1	2181.4	2206.4	2251.5	2293.5	2305.8
35°	260.4	340.2	970.0	1807.2	2078.3	2115.5	2168.6	2243.0	2298.9	2312.1
37.5°	231.7	296.6	897.7	1775.8	2015.5	2054.4	2142.1	2231.9	2294.1	2310.5
40°	212.6	271.1	842.5	1746.1	1966.6	2011.8	2120.8	2219.1	2285.6	2304.2
42.5°	197.7	249.8	782.9	1707.8	1911.4	1973.6	2095.3	2200.0	2262.2	2276.5
45°	178.1	217.9	688.3	1637.1	1825.8	1918.8	2051.7	2152.7	2211.2	2227.1
47.5°	159.5	195.6	589.5	1556.3	1738.6	1852.4	1988.4	2084.1	2137.8	2148.4
50°	148.8	180.7	523.6	1498.9	1677.0	1799.2	1937.4	2033.1	2078.3	2088.9
52.5°	140.3	168.0	461.9	1433.0	1613.2	1743.9	1875.8	1962.9	2003.9	2008.1
55°	127.6	151.5	380.0	1331.5	1512.2	1647.7	1775.3	1844.4	1873.6	1884.3
57.5°	120.7	139.3	315.7	1221.4	1398.4	1534.5	1650.4	1704.1	1727.5	1731.2
60°	114.3	132.9	281.7	1142.8	1326.2	1453.7	1554.7	1599.9	1621.2	1629.1
62.5°	107.9	128.6	256.2	1062.0	1241.1	1364.4	1452.7	1491.5	1508.5	1510.1
65°	101.0	122.3	225.9	938.1	1108.2	1222.5	1291.6	1323.5	1331.5	1336.8
67.5°	94.1	115.9	204.1	813.2	971.1	1065.7	1116.7	1144.4	1146.0	1157.1
70°	87.7	111.6	191.3	728.2	869.0	959.4	1001.9	1023.2	1020.5	1023.2
72.5°	83.4	105.2	182.8	641.0	771.2	842.5	880.7	895.6	897.2	897.7
75°	74.4	93.0	170.1	507.6	611.3	672.4	701.6	699.0	706.9	709.6
77.5°	64.3	80.3	139.8	374.2	458.2	498.6	522.0	529.4	526.7	527.3
80°	55.8	71.8	114.3	287.0	356.1	388.0	409.3	414.6	411.9	414.6
82.5°	45.2	59.0	88.8	212.6	266.8	292.3	307.2	308.3	309.9	314.7
85°	26.6	34.5	53.2	116.9	148.8	162.1	172.7	175.4	178.1	178.1
87.5°	10.6	14.9	27.6	48.9	61.7	65.9	65.9	61.7	65.9	59.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)