

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-075D-940-1D-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-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

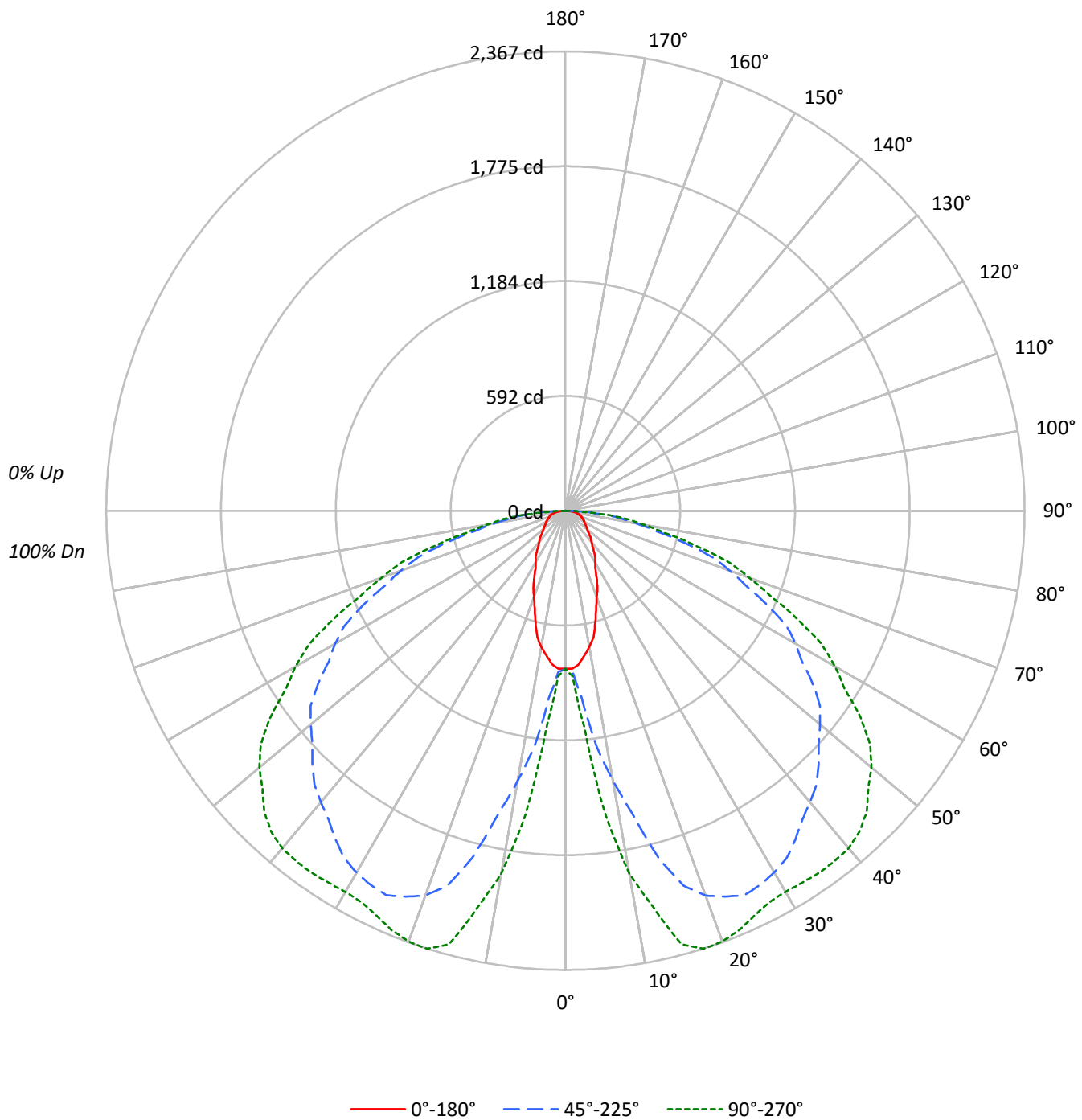
Lumens per Lamp: N/A
Luminaire Lumens: 6304.7 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 79.4
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2506	2506	2506
5°	2450	2980	3469
10°	2225	4409	5922
15°	1893	5892	7364
20°	1543	6906	7733
25°	1289	7418	7813
30°	1088	7647	8056
35°	964	7760	8556
40°	841	7872	9118
45°	763	8026	9548
50°	702	8197	9851
55°	674	8350	9958
60°	693	8427	9877
65°	724	8359	9588
70°	777	8103	9068
75°	871	7517	8311
80°	974	6495	7237
85°	925	5408	6193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 9999 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.9	1.7
10°-20°	465.4	7.4
20°-30°	815.6	12.9
30°-40°	1050.2	16.7
40°-50°	1172.5	18.6
50°-60°	1124.4	17.8
60°-70°	894.8	14.2
70°-80°	527.2	8.4
80°-90°	147.8	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°	1387.9	22.0
0°-40°	2438.0	38.7
0°-60°	4734.9	75.1
0°-90°	6304.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6304.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	794	851	965	1089	1124	73
15°	595	1092	1851	2238	2313	165
25°	380	1239	2186	2299	2303	175
35°	257	1162	2067	2193	2279	160
45°	176	912	1845	2097	2195	136
55°	126	609	1557	1801	1857	115
65°	100	398	1149	1297	1318	99
75°	73	251	633	690	699	76
85°	26	68	153	172	176	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°	814.7	814.7	814.7	814.7	814.7	814.7	814.7	814.7	814.7	814.7
2.5°	814.7	814.7	818.9	825.2	827.2	835.6	848.2	854.5	858.7	854.5
5°	793.7	804.2	838.3	888.0	937.8	992.8	1063.5	1097.6	1118.5	1123.8
7.5°	752.3	781.1	878.1	1008.0	1152.6	1296.1	1420.3	1520.9	1579.6	1582.2
10°	712.5	762.3	911.6	1110.7	1309.8	1514.1	1684.4	1789.1	1873.0	1896.5
12.5°	668.5	743.4	947.2	1213.4	1485.8	1715.3	1904.4	2019.7	2086.7	2095.6
15°	594.6	704.7	998.0	1375.3	1713.2	1988.2	2169.0	2260.7	2302.6	2313.0
17.5°	526.0	670.1	1042.6	1502.0	1902.3	2150.1	2287.4	2345.0	2366.0	2367.0
20°	471.5	636.5	1063.5	1590.1	1998.7	2221.4	2320.9	2357.6	2368.1	2362.8
22.5°	431.7	600.9	1076.1	1648.7	2057.4	2248.6	2323.0	2340.8	2345.0	2339.8
25°	379.8	542.2	1076.6	1726.3	2116.6	2255.4	2294.7	2300.0	2305.2	2302.6
27.5°	333.7	476.8	1060.9	1777.6	2125.0	2223.5	2241.8	2254.9	2271.1	2274.8
30°	306.5	434.8	1040.0	1794.4	2116.6	2189.9	2208.3	2231.8	2260.7	2268.5
32.5°	285.5	395.0	1008.5	1796.5	2095.6	2150.1	2174.7	2219.3	2260.7	2272.7
35°	256.7	335.3	956.1	1781.3	2048.5	2085.1	2137.5	2210.9	2265.9	2279.0
37.5°	228.4	292.3	884.9	1750.4	1986.7	2024.9	2111.3	2199.9	2261.2	2277.4
40°	209.6	267.2	830.4	1721.0	1938.5	1983.0	2090.4	2187.3	2252.8	2271.1
42.5°	194.9	246.2	771.7	1683.3	1884.0	1945.3	2065.2	2168.5	2229.7	2243.9
45°	175.5	214.8	678.5	1613.6	1799.6	1891.3	2022.3	2121.8	2179.5	2195.2
47.5°	157.2	192.8	581.0	1534.0	1713.7	1825.8	1959.9	2054.2	2107.2	2117.6
50°	146.7	178.1	516.0	1477.4	1652.9	1773.4	1909.6	2003.9	2048.5	2059.0
52.5°	138.3	165.6	455.3	1412.5	1590.1	1718.9	1848.9	1934.8	1975.1	1979.3
55°	125.7	149.3	374.6	1312.4	1490.5	1624.1	1749.8	1818.0	1846.8	1857.3
57.5°	118.9	137.3	311.2	1203.9	1378.4	1512.5	1626.7	1679.6	1702.7	1706.4
60°	112.6	131.0	277.7	1126.4	1307.1	1432.9	1532.4	1577.0	1597.9	1605.8
62.5°	106.4	126.8	252.5	1046.8	1223.3	1344.9	1431.8	1470.1	1486.8	1488.4
65°	99.5	120.5	222.7	924.7	1092.3	1205.0	1273.1	1304.5	1312.4	1317.6
67.5°	92.7	114.2	201.2	801.6	957.2	1050.4	1100.7	1128.0	1129.5	1140.5
70°	86.4	110.0	188.6	717.8	856.6	945.7	987.6	1008.5	1005.9	1008.5
72.5°	82.3	103.7	180.2	631.8	760.2	830.4	868.1	882.8	884.4	884.9
75°	73.3	91.7	167.7	500.3	602.5	662.7	691.6	688.9	696.8	699.4
77.5°	63.4	79.1	137.8	368.8	451.6	491.4	514.5	521.8	519.2	519.7
80°	55.0	70.7	112.6	282.9	351.0	382.5	403.4	408.6	406.0	408.6
82.5°	44.5	58.2	87.5	209.6	263.0	288.1	302.8	303.9	305.4	310.2
85°	26.2	34.1	52.4	115.3	146.7	159.8	170.3	172.9	175.5	175.5
87.5°	10.5	14.7	27.2	48.2	60.8	65.0	65.0	60.8	65.0	58.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)