

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-840-1D-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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

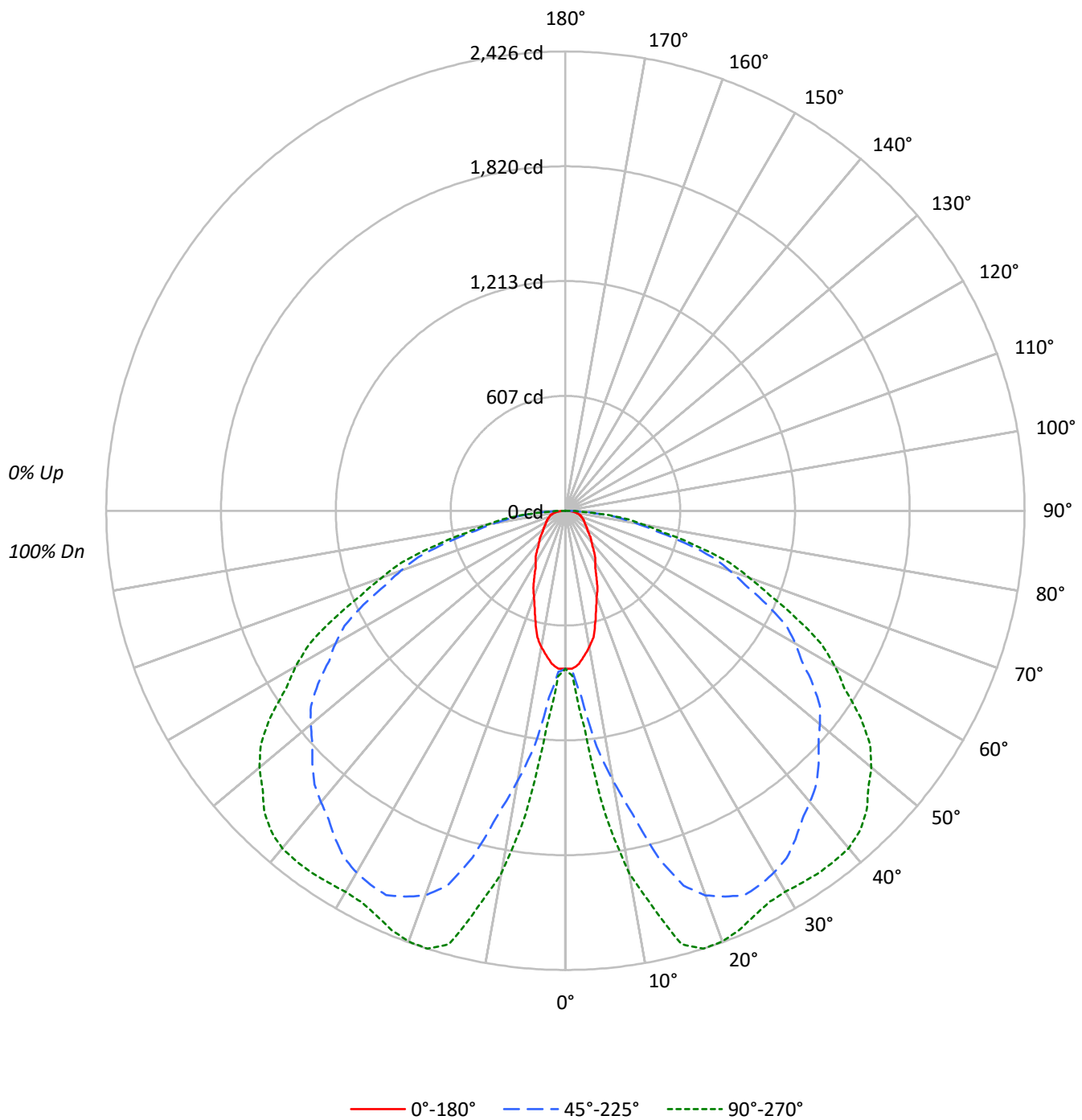
Lumens per Lamp: N/A
Luminaire Lumens: 6460.8 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

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
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°	3851	3851	3851
5°	3767	4581	5333
10°	3420	6778	9104
15°	2910	9057	11320
20°	2372	10615	11887
25°	1981	11402	12010
30°	1673	11754	12383
35°	1482	11928	13152
40°	1294	12100	14016
45°	1174	12338	14676
50°	1079	12599	15142
55°	1037	12835	15307
60°	1065	12953	15182
65°	1113	12849	14738
70°	1195	12455	13940
75°	1340	11554	12774
80°	1498	9983	11126
85°	1419	8310	9522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 15370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	1.7
10°-20°	476.9	7.4
20°-30°	835.8	12.9
30°-40°	1076.2	16.7
40°-50°	1201.5	18.6
50°-60°	1152.2	17.8
60°-70°	917.0	14.2
70°-80°	540.2	8.4
80°-90°	151.4	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°	1422.2	22.0
0°-40°	2498.4	38.7
0°-60°	4852.2	75.1
0°-90°	6460.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6460.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	813	872	989	1116	1152	75
15°	609	1119	1896	2293	2370	169
25°	389	1270	2240	2356	2360	179
35°	263	1191	2118	2247	2335	164
45°	180	935	1891	2149	2250	139
55°	129	624	1596	1846	1903	118
65°	102	408	1177	1329	1350	101
75°	75	257	648	707	717	78
85°	27	70	157	177	180	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°	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8
2.5°	834.8	834.8	839.1	845.6	847.7	856.3	869.2	875.6	879.9	875.6
5°	813.4	824.1	859.0	910.0	961.0	1017.4	1089.9	1124.8	1146.2	1151.6
7.5°	771.0	800.5	899.8	1032.9	1181.1	1328.2	1455.5	1558.5	1618.7	1621.4
10°	730.2	781.2	934.2	1138.2	1342.2	1551.6	1726.1	1833.4	1919.3	1943.5
12.5°	685.1	761.8	970.7	1243.4	1522.6	1757.7	1951.5	2069.7	2138.4	2147.5
15°	609.4	722.1	1022.7	1409.3	1755.6	2037.4	2222.7	2316.6	2359.6	2370.3
17.5°	539.0	686.7	1068.4	1539.2	1949.4	2203.3	2344.0	2403.1	2424.5	2425.6
20°	483.2	652.3	1089.9	1629.4	2048.2	2276.4	2378.4	2415.9	2426.7	2421.3
22.5°	442.4	615.8	1102.7	1689.5	2108.3	2304.3	2380.5	2398.8	2403.1	2397.7
25°	389.2	555.7	1103.3	1769.0	2169.0	2311.2	2351.5	2356.9	2362.3	2359.6
27.5°	342.0	488.6	1087.2	1821.6	2177.6	2278.5	2297.3	2310.7	2327.4	2331.1
30°	314.1	445.6	1065.7	1838.8	2169.0	2244.1	2262.9	2287.1	2316.6	2324.7
32.5°	292.6	404.8	1033.5	1840.9	2147.5	2203.3	2228.6	2274.2	2316.6	2329.0
35°	263.1	343.6	979.8	1825.4	2099.2	2136.8	2190.5	2265.6	2322.0	2335.4
37.5°	234.1	299.6	906.8	1793.7	2035.8	2075.0	2163.6	2254.3	2317.2	2333.8
40°	214.8	273.8	850.9	1763.6	1986.4	2032.1	2142.1	2241.5	2308.6	2327.4
42.5°	199.7	252.3	790.8	1725.0	1930.6	1993.4	2116.4	2222.1	2284.9	2299.4
45°	179.9	220.1	695.3	1653.6	1844.2	1938.1	2072.3	2174.3	2233.4	2249.5
47.5°	161.1	197.6	595.4	1572.0	1756.1	1871.0	2008.5	2105.1	2159.3	2170.0
50°	150.3	182.5	528.8	1514.0	1693.8	1817.3	1956.9	2053.5	2099.2	2109.9
52.5°	141.7	169.7	466.5	1447.4	1629.4	1761.5	1894.6	1982.7	2024.0	2028.3
55°	128.9	153.0	383.9	1344.9	1527.4	1664.3	1793.2	1863.0	1892.5	1903.2
57.5°	121.9	140.7	318.9	1233.7	1412.5	1550.0	1667.0	1721.2	1744.8	1748.6
60°	115.4	134.2	284.5	1154.3	1339.5	1468.4	1570.4	1616.0	1637.5	1645.5
62.5°	109.0	129.9	258.8	1072.7	1253.6	1378.2	1467.3	1506.5	1523.7	1525.3
65°	102.0	123.5	228.2	947.6	1119.4	1234.8	1304.6	1336.8	1344.9	1350.2
67.5°	95.0	117.0	206.2	821.4	980.9	1076.4	1128.0	1155.9	1157.5	1168.8
70°	88.6	112.7	193.3	735.5	877.8	969.1	1012.0	1033.5	1030.8	1033.5
72.5°	84.3	106.3	184.7	647.5	779.0	850.9	889.6	904.6	906.2	906.8
75°	75.2	94.0	171.8	512.7	617.4	679.1	708.7	706.0	714.0	716.7
77.5°	65.0	81.1	141.2	378.0	462.8	503.6	527.2	534.7	532.0	532.6
80°	56.4	72.5	115.4	289.9	359.7	391.9	413.4	418.8	416.1	418.8
82.5°	45.6	59.6	89.7	214.8	269.5	295.3	310.3	311.4	313.0	317.8
85°	26.8	34.9	53.7	118.1	150.3	163.7	174.5	177.2	179.9	179.9
87.5°	10.7	15.0	27.9	49.4	62.3	66.6	66.6	62.3	66.6	60.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)