

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-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-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

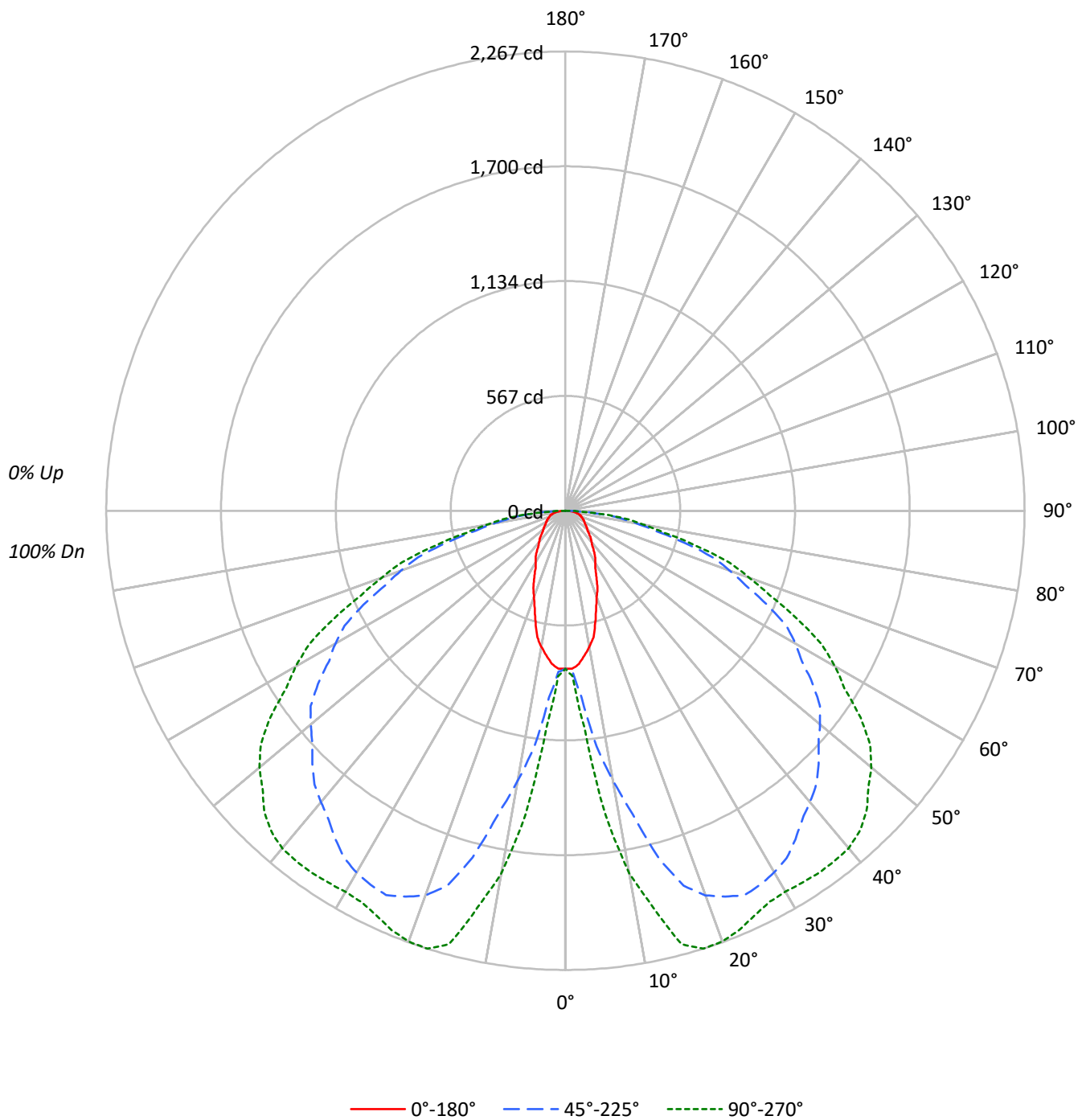
Lumens per Lamp: N/A
Luminaire Lumens: 6037.5 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

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
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°	3599	3599	3599
5°	3520	4280	4984
10°	3196	6334	8508
15°	2719	8464	10578
20°	2216	9919	11108
25°	1851	10655	11223
30°	1563	10984	11572
35°	1384	11146	12290
40°	1209	11307	13097
45°	1097	11530	13714
50°	1008	11774	14150
55°	968	11994	14304
60°	996	12105	14187
65°	1040	12007	13773
70°	1117	11639	13027
75°	1251	10798	11938
80°	1400	9329	10395
85°	1329	7767	8897

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 14363 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.3	1.7
10°-20°	445.7	7.4
20°-30°	781.0	12.9
30°-40°	1005.7	16.7
40°-50°	1122.8	18.6
50°-60°	1076.7	17.8
60°-70°	856.9	14.2
70°-80°	504.8	8.4
80°-90°	141.5	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°	1329.0	22.0
0°-40°	2334.7	38.7
0°-60°	4534.3	75.1
0°-90°	6037.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6037.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	760	815	924	1043	1076	70
15°	569	1046	1772	2143	2215	158
25°	364	1187	2093	2201	2205	168
35°	246	1113	1979	2100	2182	153
45°	168	874	1767	2008	2102	130
55°	120	583	1491	1725	1778	110
65°	95	381	1100	1242	1262	94
75°	70	240	606	660	670	73
85°	25	65	147	165	168	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1
2.5°	780.1	780.1	784.2	790.2	792.2	800.2	812.3	818.3	822.3	818.3
5°	760.1	770.1	802.7	850.4	898.0	950.7	1018.5	1051.1	1071.1	1076.2
7.5°	720.4	748.0	840.9	965.3	1103.7	1241.2	1360.1	1456.4	1512.6	1515.1
10°	682.3	730.0	873.0	1063.6	1254.3	1449.9	1613.0	1713.3	1793.6	1816.2
12.5°	640.2	711.9	907.1	1161.9	1422.8	1642.6	1823.7	1934.1	1998.3	2006.8
15°	569.4	674.8	955.7	1317.0	1640.6	1904.0	2077.1	2164.9	2205.0	2215.0
17.5°	503.7	641.7	998.4	1438.4	1821.7	2059.0	2190.4	2245.6	2265.7	2266.7
20°	451.5	609.6	1018.5	1522.7	1914.0	2127.2	2222.5	2257.7	2267.7	2262.7
22.5°	413.4	575.5	1030.5	1578.9	1970.2	2153.3	2224.6	2241.6	2245.6	2240.6
25°	363.7	519.3	1031.0	1653.1	2026.9	2159.8	2197.5	2202.5	2207.5	2205.0
27.5°	319.6	456.6	1016.0	1702.3	2034.9	2129.2	2146.8	2159.3	2174.9	2178.4
30°	293.5	416.4	995.9	1718.3	2026.9	2097.1	2114.7	2137.3	2164.9	2172.4
32.5°	273.4	378.3	965.8	1720.3	2006.8	2059.0	2082.6	2125.2	2164.9	2176.4
35°	245.8	321.1	915.6	1705.8	1961.7	1996.8	2047.0	2117.2	2169.9	2182.4
37.5°	218.7	280.0	847.4	1676.2	1902.5	1939.1	2021.9	2106.7	2165.4	2180.9
40°	200.7	255.9	795.2	1648.1	1856.3	1898.9	2001.8	2094.6	2157.3	2174.9
42.5°	186.6	235.8	739.0	1612.0	1804.1	1862.8	1977.7	2076.6	2135.3	2148.8
45°	168.1	205.7	649.7	1545.2	1723.4	1811.2	1936.6	2031.9	2087.1	2102.1
47.5°	150.5	184.6	556.4	1469.0	1641.1	1748.4	1876.9	1967.2	2017.9	2027.9
50°	140.5	170.6	494.2	1414.8	1582.9	1698.3	1828.7	1919.0	1961.7	1971.7
52.5°	132.4	158.5	436.0	1352.6	1522.7	1646.1	1770.5	1852.8	1891.4	1895.4
55°	120.4	143.0	358.7	1256.8	1427.3	1555.3	1675.7	1740.9	1768.5	1778.5
57.5°	113.9	131.4	298.0	1152.9	1320.0	1448.4	1557.8	1608.5	1630.5	1634.0
60°	107.9	125.4	265.9	1078.7	1251.8	1372.2	1467.5	1510.1	1530.2	1537.7
62.5°	101.8	121.4	241.8	1002.4	1171.5	1287.9	1371.2	1407.8	1423.8	1425.3
65°	95.3	115.4	213.2	885.5	1046.1	1153.9	1219.1	1249.2	1256.8	1261.8
67.5°	88.8	109.4	192.7	767.6	916.6	1005.9	1054.1	1080.2	1081.7	1092.2
70°	82.8	105.4	180.6	687.3	820.3	905.6	945.7	965.8	963.3	965.8
72.5°	78.8	99.3	172.6	605.1	728.0	795.2	831.3	845.4	846.9	847.4
75°	70.2	87.8	160.5	479.1	577.0	634.7	662.2	659.7	667.3	669.8
77.5°	60.7	75.8	131.9	353.2	432.5	470.6	492.7	499.7	497.2	497.7
80°	52.7	67.7	107.9	270.9	336.1	366.2	386.3	391.3	388.8	391.3
82.5°	42.6	55.7	83.8	200.7	251.9	275.9	290.0	291.0	292.5	297.0
85°	25.1	32.6	50.2	110.4	140.5	153.0	163.1	165.6	168.1	168.1
87.5°	10.0	14.0	26.1	46.2	58.2	62.2	62.2	58.2	62.2	56.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)