

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-830-1D-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-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

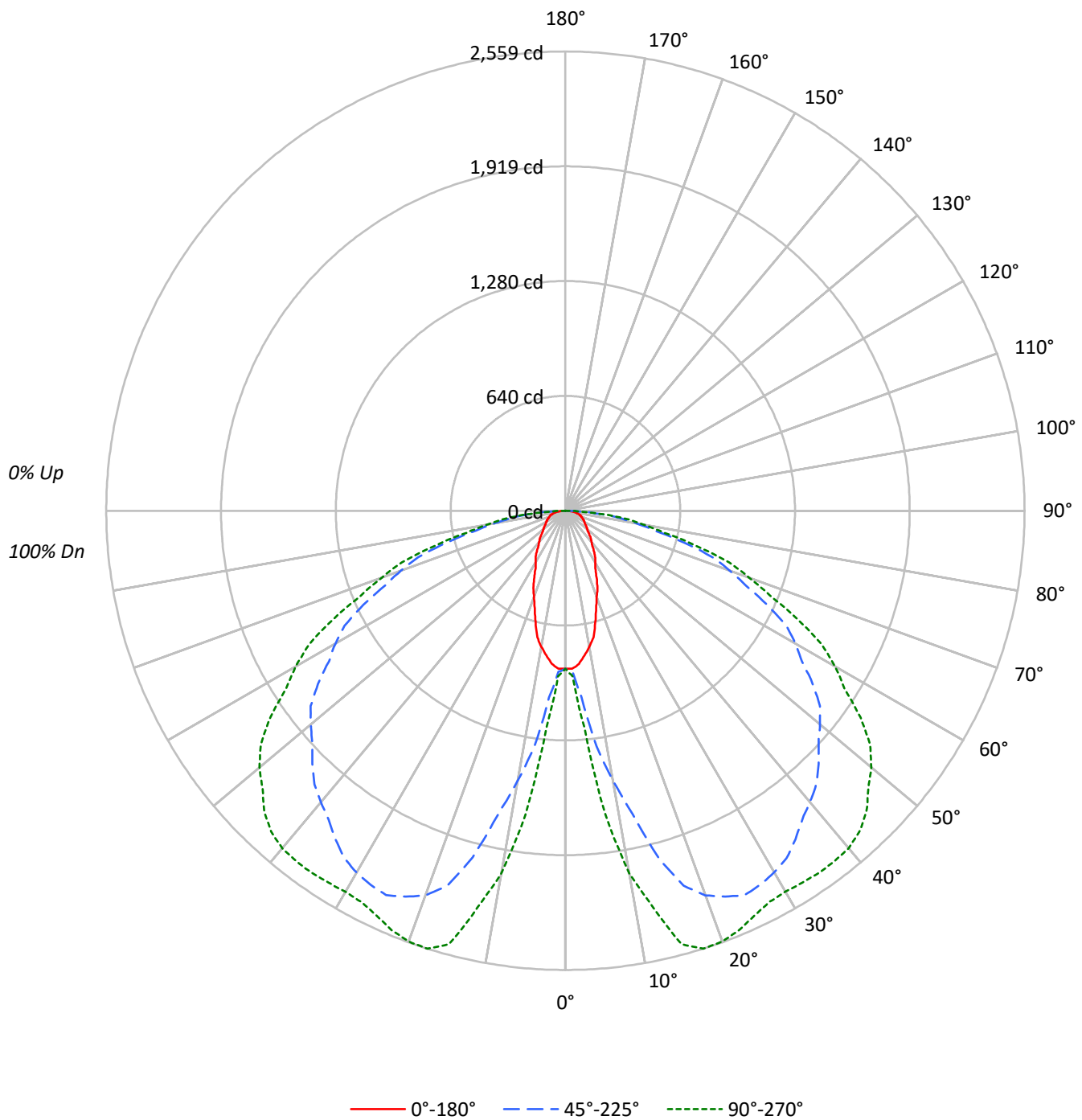
Lumens per Lamp: N/A
Luminaire Lumens: 6815.3 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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	50	30	10
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°	2708	2708	2708
5°	2649	3221	3750
10°	2405	4766	6402
15°	2047	6370	7961
20°	1668	7465	8359
25°	1393	8019	8446
30°	1177	8266	8708
35°	1042	8388	9249
40°	909	8509	9856
45°	825	8677	10320
50°	759	8860	10649
55°	729	9026	10765
60°	749	9109	10677
65°	783	9036	10365
70°	840	8759	9803
75°	942	8126	8984
80°	1054	7020	7823
85°	999	5845	6694

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 10809 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	1.7
10°-20°	503.1	7.4
20°-30°	881.6	12.9
30°-40°	1135.2	16.7
40°-50°	1267.5	18.6
50°-60°	1215.4	17.8
60°-70°	967.3	14.2
70°-80°	569.9	8.4
80°-90°	159.7	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°	1500.3	22.0
0°-40°	2635.5	38.7
0°-60°	5118.4	75.1
0°-90°	6815.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6815.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	881	881	881	881	881	
5°	858	920	1043	1177	1215	79
15°	643	1181	2001	2419	2500	178
25°	411	1339	2363	2485	2489	189
35°	278	1257	2234	2370	2464	173
45°	190	986	1995	2267	2373	147
55°	136	658	1683	1947	2008	124
65°	108	430	1242	1402	1424	107
75°	79	271	684	745	756	83
85°	28	74	166	186	190	32
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6	880.6
2.5°	880.6	880.6	885.2	892.0	894.2	903.3	916.9	923.7	928.2	923.7
5°	858.0	869.3	906.1	959.9	1013.7	1073.2	1149.7	1186.5	1209.1	1214.8
7.5°	813.3	844.4	949.2	1089.6	1245.9	1401.1	1535.3	1644.1	1707.5	1710.3
10°	770.2	824.0	985.4	1200.6	1415.8	1636.7	1820.8	1934.0	2024.6	2050.1
12.5°	722.6	803.6	1023.9	1311.6	1606.1	1854.2	2058.6	2183.2	2255.7	2265.3
15°	642.8	761.7	1078.9	1486.6	1851.9	2149.2	2344.6	2443.7	2489.0	2500.4
17.5°	568.6	724.3	1127.0	1623.7	2056.4	2324.2	2472.6	2534.9	2557.6	2558.7
20°	509.7	688.1	1149.7	1718.8	2160.6	2401.3	2508.9	2548.5	2559.8	2554.2
22.5°	466.7	649.6	1163.3	1782.3	2224.0	2430.7	2511.1	2530.4	2534.9	2529.2
25°	410.6	586.2	1163.8	1866.1	2288.0	2438.1	2480.5	2486.2	2491.9	2489.0
27.5°	360.8	515.4	1146.8	1921.6	2297.1	2403.5	2423.3	2437.5	2455.1	2459.0
30°	331.3	470.1	1124.2	1939.7	2288.0	2367.3	2387.1	2412.6	2443.7	2452.2
32.5°	308.7	427.0	1090.2	1942.0	2265.3	2324.2	2350.9	2399.0	2443.7	2456.8
35°	277.5	362.5	1033.6	1925.5	2214.4	2254.0	2310.6	2389.9	2449.4	2463.6
37.5°	246.9	316.0	956.5	1892.1	2147.5	2188.9	2282.3	2378.0	2444.3	2461.9
40°	226.5	288.8	897.6	1860.4	2095.4	2143.6	2259.7	2364.4	2435.2	2455.1
42.5°	210.7	266.2	834.2	1819.6	2036.5	2102.8	2232.5	2344.1	2410.3	2425.6
45°	189.7	232.2	733.4	1744.3	1945.4	2044.5	2186.1	2293.7	2356.0	2372.9
47.5°	169.9	208.4	628.1	1658.2	1852.5	1973.7	2118.7	2220.6	2277.8	2289.1
50°	158.6	192.6	557.8	1597.1	1786.8	1917.0	2064.3	2166.2	2214.4	2225.7
52.5°	149.5	179.0	492.1	1526.8	1718.8	1858.1	1998.6	2091.5	2135.1	2139.6
55°	135.9	161.4	404.9	1418.7	1611.2	1755.6	1891.6	1965.2	1996.3	2007.7
57.5°	128.6	148.4	336.4	1301.4	1490.0	1635.0	1758.5	1815.7	1840.6	1844.6
60°	121.8	141.6	300.2	1217.6	1413.0	1548.9	1656.5	1704.7	1727.3	1735.8
62.5°	115.0	137.1	273.0	1131.5	1322.4	1453.8	1547.8	1589.1	1607.3	1609.0
65°	107.6	130.3	240.7	999.6	1180.8	1302.6	1376.2	1410.2	1418.7	1424.3
67.5°	100.2	123.5	217.5	866.5	1034.7	1135.5	1189.9	1219.3	1221.0	1232.9
70°	93.4	118.9	203.9	775.9	926.0	1022.2	1067.5	1090.2	1087.4	1090.2
72.5°	88.9	112.1	194.8	683.0	821.8	897.6	938.4	954.3	956.0	956.5
75°	79.3	99.1	181.2	540.8	651.3	716.4	747.6	744.7	753.2	756.1
77.5°	68.5	85.5	148.9	398.7	488.2	531.2	556.1	564.1	561.2	561.8
80°	59.5	76.5	121.8	305.8	379.4	413.4	436.1	441.7	438.9	441.7
82.5°	48.1	62.9	94.6	226.5	284.3	311.5	327.3	328.5	330.2	335.3
85°	28.3	36.8	56.6	124.6	158.6	172.7	184.1	186.9	189.7	189.7
87.5°	11.3	15.9	29.4	52.1	65.7	70.2	70.2	65.7	70.2	63.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)