

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-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-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

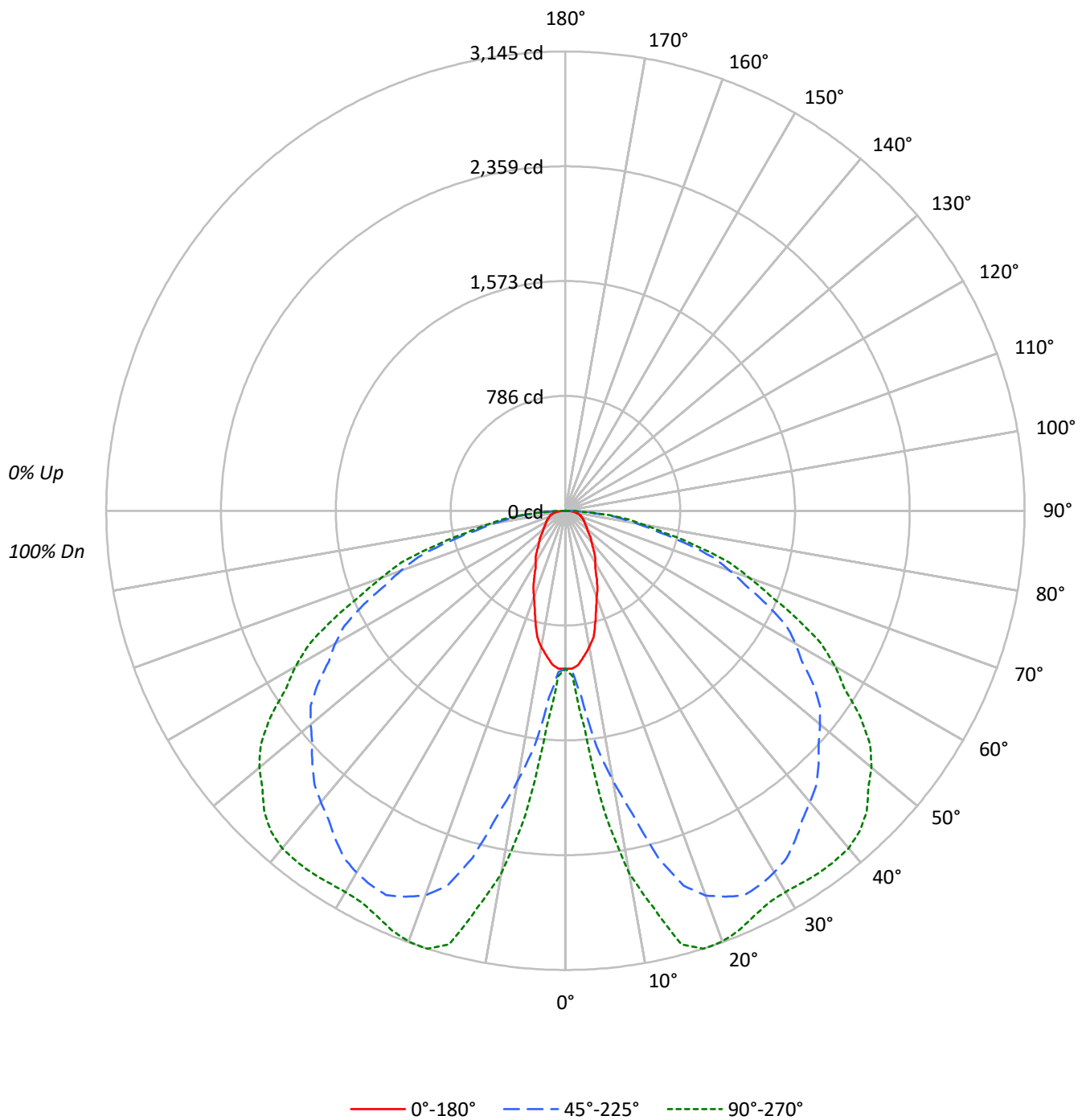
Lumens per Lamp: N/A
Luminaire Lumens: 8377.8 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 108.2
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		0
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°	3329	3329	3329
5°	3256	3960	4610
10°	2957	5859	7870
15°	2516	7830	9786
20°	2051	9176	10276
25°	1713	9857	10383
30°	1446	10161	10705
35°	1281	10311	11370
40°	1118	10460	12116
45°	1014	10666	12687
50°	932	10892	13090
55°	896	11096	13232
60°	921	11198	13125
65°	963	11107	12741
70°	1033	10767	12050
75°	1159	9989	11044
80°	1295	8630	9617
85°	1228	7184	8229

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13288 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	1.7
10°-20°	618.5	7.4
20°-30°	1083.8	12.9
30°-40°	1395.5	16.7
40°-50°	1558.1	18.6
50°-60°	1494.1	17.8
60°-70°	1189.1	14.2
70°-80°	700.5	8.4
80°-90°	196.4	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°	1844.2	22.0
0°-40°	3239.7	38.7
0°-60°	6291.9	75.1
0°-90°	8377.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8377.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1055	1130	1283	1447	1493	97
15°	790	1452	2459	2974	3074	219
25°	505	1646	2905	3054	3060	233
35°	341	1545	2746	2914	3028	213
45°	233	1212	2452	2786	2917	181
55°	167	809	2069	2393	2468	152
65°	132	529	1526	1723	1751	131
75°	98	333	841	916	929	102
85°	35	90	204	229	233	39
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	1082.6	1082.6	1082.6	1082.6	1082.6	1082.6	1082.6	1082.6	1082.6	1082.6
2.5°	1082.6	1082.6	1088.1	1096.5	1099.3	1110.4	1127.1	1135.5	1141.0	1135.5
5°	1054.7	1068.6	1113.9	1180.0	1246.2	1319.3	1413.2	1458.5	1486.3	1493.3
7.5°	999.7	1038.0	1166.8	1339.4	1531.6	1722.3	1887.3	2021.0	2099.0	2102.5
10°	946.8	1012.9	1211.3	1475.9	1740.4	2012.0	2238.2	2377.4	2488.8	2520.2
12.5°	888.3	987.9	1258.7	1612.3	1974.4	2279.3	2530.6	2683.8	2772.9	2784.7
15°	790.2	936.4	1326.2	1827.5	2276.5	2642.0	2882.2	3004.0	3059.7	3073.6
17.5°	699.0	890.4	1385.4	1995.9	2527.8	2857.1	3039.5	3116.1	3143.9	3145.3
20°	626.6	845.9	1413.2	2112.9	2655.9	2951.8	3084.1	3132.8	3146.7	3139.8
22.5°	573.7	798.5	1429.9	2190.9	2733.9	2988.0	3086.9	3110.5	3116.1	3109.1
25°	504.7	720.5	1430.6	2293.9	2812.6	2997.0	3049.3	3056.2	3063.2	3059.7
27.5°	443.5	633.5	1409.8	2362.1	2823.7	2954.6	2978.9	2996.3	3017.9	3022.8
30°	407.3	577.8	1381.9	2384.4	2812.6	2910.0	2934.4	2965.7	3004.0	3014.4
32.5°	379.4	524.9	1340.1	2387.2	2784.7	2857.1	2889.8	2949.0	3004.0	3020.0
35°	341.1	445.6	1270.5	2367.0	2722.1	2770.8	2840.4	2937.9	3011.0	3028.4
37.5°	303.5	388.5	1175.8	2325.9	2639.9	2690.7	2805.6	2923.2	3004.7	3026.3
40°	278.5	355.1	1103.4	2286.9	2575.9	2635.0	2777.7	2906.5	2993.6	3017.9
42.5°	259.0	327.2	1025.5	2236.8	2503.5	2584.9	2744.3	2881.5	2962.9	2981.7
45°	233.2	285.4	901.5	2144.2	2391.4	2513.2	2687.2	2819.5	2896.1	2917.0
47.5°	208.9	256.2	772.1	2038.4	2277.2	2426.2	2604.4	2729.7	2800.0	2813.9
50°	194.9	236.7	685.7	1963.2	2196.4	2356.6	2537.6	2662.9	2722.1	2736.0
52.5°	183.8	220.0	605.0	1876.9	2112.9	2284.2	2456.8	2571.0	2624.6	2630.2
55°	167.1	198.4	497.8	1743.9	1980.6	2158.2	2325.2	2415.7	2454.0	2467.9
57.5°	158.0	182.4	413.5	1599.8	1831.6	2009.9	2161.6	2231.9	2262.6	2267.4
60°	149.7	174.0	369.0	1496.8	1737.0	1904.0	2036.3	2095.5	2123.3	2133.8
62.5°	141.3	168.5	335.6	1391.0	1625.6	1787.1	1902.7	1953.5	1975.8	1977.8
65°	132.3	160.1	295.9	1228.8	1451.5	1601.2	1691.7	1733.5	1743.9	1750.9
67.5°	123.2	151.8	267.3	1065.2	1271.9	1395.8	1462.7	1498.9	1501.0	1515.6
70°	114.9	146.2	250.6	953.8	1138.3	1256.6	1312.3	1340.1	1336.7	1340.1
72.5°	109.3	137.8	239.5	839.6	1010.2	1103.4	1153.6	1173.1	1175.1	1175.8
75°	97.5	121.8	222.8	664.8	800.6	880.7	919.0	915.5	925.9	929.4
77.5°	84.2	105.1	183.1	490.1	600.1	653.0	683.6	693.4	689.9	690.6
80°	73.1	94.0	149.7	375.9	466.4	508.2	536.1	543.0	539.5	543.0
82.5°	59.2	77.3	116.3	278.5	349.5	382.9	402.4	403.8	405.9	412.1
85°	34.8	45.3	69.6	153.2	194.9	212.3	226.3	229.7	233.2	233.2
87.5°	13.9	19.5	36.2	64.0	80.8	86.3	86.3	80.8	86.3	78.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)