

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-835-1D-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-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

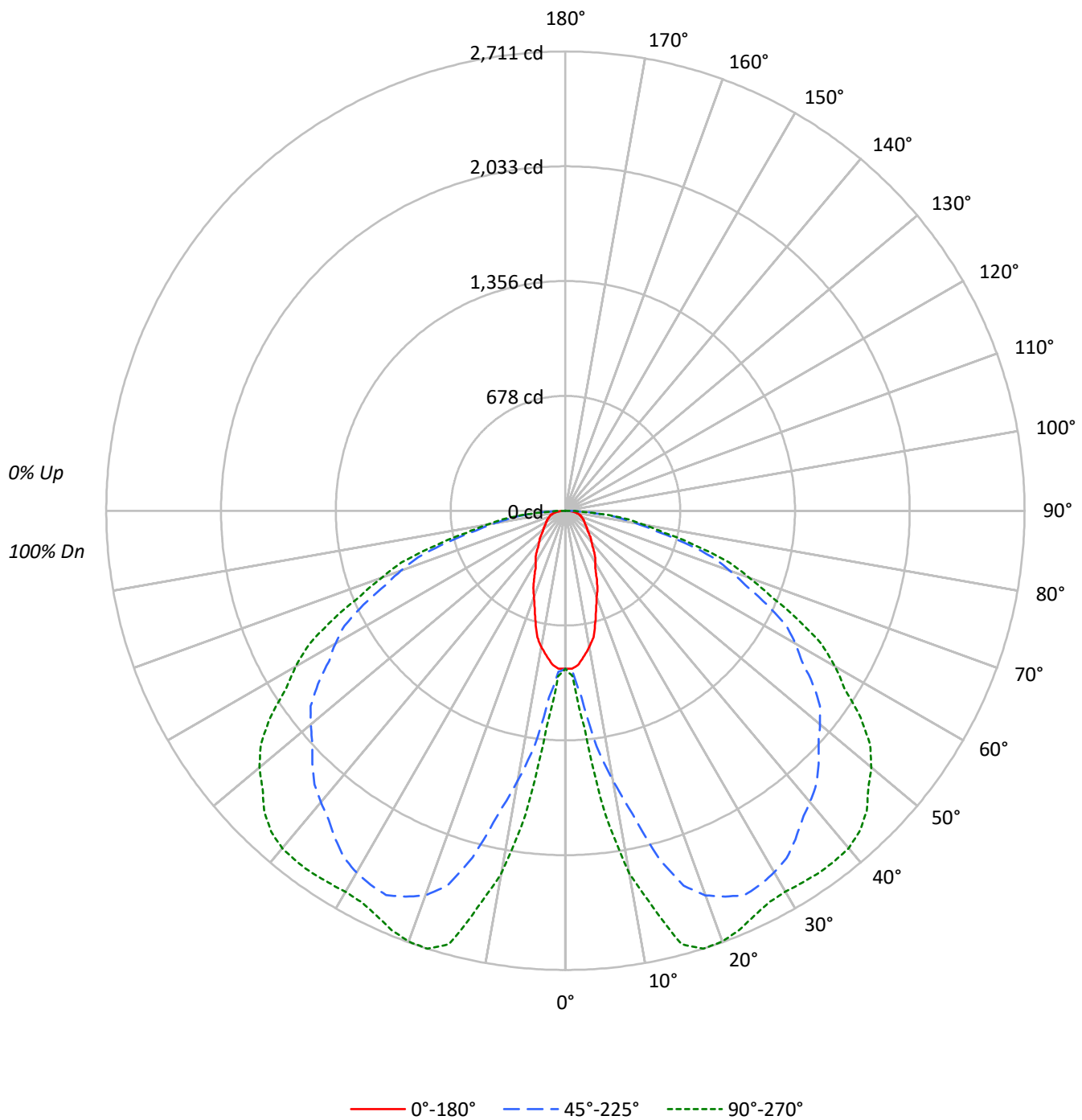
Lumens per Lamp: N/A
Luminaire Lumens: 7220.4 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

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
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°	2869	2869	2869
5°	2806	3413	3973
10°	2548	5050	6783
15°	2168	6748	8434
20°	1767	7909	8856
25°	1476	8495	8948
30°	1246	8757	9226
35°	1104	8887	9799
40°	964	9015	10442
45°	874	9192	10934
50°	804	9387	11282
55°	772	9563	11405
60°	793	9651	11311
65°	830	9573	10981
70°	890	9280	10386
75°	998	8609	9518
80°	1116	7438	8289
85°	1059	6193	7093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 11452 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.4	1.7
10°-20°	533.0	7.4
20°-30°	934.0	12.9
30°-40°	1202.7	16.7
40°-50°	1342.8	18.6
50°-60°	1287.7	17.8
60°-70°	1024.8	14.2
70°-80°	603.7	8.4
80°-90°	169.2	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°	1589.4	22.0
0°-40°	2792.1	38.7
0°-60°	5422.7	75.1
0°-90°	7220.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7220.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	909	974	1106	1247	1287	83
15°	681	1251	2120	2563	2649	189
25°	435	1419	2504	2632	2637	201
35°	294	1331	2367	2511	2610	184
45°	201	1045	2114	2402	2514	156
55°	144	698	1784	2062	2127	131
65°	114	456	1316	1485	1509	113
75°	84	287	724	790	801	88
85°	30	78	176	197	201	34
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0
2.5°	933.0	933.0	937.8	945.0	947.4	957.0	971.4	978.6	983.4	978.6
5°	909.0	921.0	960.0	1017.0	1074.0	1137.0	1218.0	1257.0	1281.0	1287.0
7.5°	861.6	894.6	1005.6	1154.4	1320.0	1484.4	1626.6	1741.8	1809.0	1812.0
10°	816.0	873.0	1044.0	1272.0	1500.0	1734.0	1929.0	2049.0	2145.0	2172.0
12.5°	765.6	851.4	1084.8	1389.6	1701.6	1964.4	2181.0	2313.0	2389.8	2400.0
15°	681.0	807.0	1143.0	1575.0	1962.0	2277.0	2484.0	2589.0	2637.0	2649.0
17.5°	602.4	767.4	1194.0	1720.2	2178.6	2462.4	2619.6	2685.6	2709.6	2710.8
20°	540.0	729.0	1218.0	1821.0	2289.0	2544.0	2658.0	2700.0	2712.0	2706.0
22.5°	494.4	688.2	1232.4	1888.2	2356.2	2575.2	2660.4	2680.8	2685.6	2679.6
25°	435.0	621.0	1233.0	1977.0	2424.0	2583.0	2628.0	2634.0	2640.0	2637.0
27.5°	382.2	546.0	1215.0	2035.8	2433.6	2546.4	2567.4	2582.4	2601.0	2605.2
30°	351.0	498.0	1191.0	2055.0	2424.0	2508.0	2529.0	2556.0	2589.0	2598.0
32.5°	327.0	452.4	1155.0	2057.4	2400.0	2462.4	2490.6	2541.6	2589.0	2602.8
35°	294.0	384.0	1095.0	2040.0	2346.0	2388.0	2448.0	2532.0	2595.0	2610.0
37.5°	261.6	334.8	1013.4	2004.6	2275.2	2319.0	2418.0	2519.4	2589.6	2608.2
40°	240.0	306.0	951.0	1971.0	2220.0	2271.0	2394.0	2505.0	2580.0	2601.0
42.5°	223.2	282.0	883.8	1927.8	2157.6	2227.8	2365.2	2483.4	2553.6	2569.8
45°	201.0	246.0	777.0	1848.0	2061.0	2166.0	2316.0	2430.0	2496.0	2514.0
47.5°	180.0	220.8	665.4	1756.8	1962.6	2091.0	2244.6	2352.6	2413.2	2425.2
50°	168.0	204.0	591.0	1692.0	1893.0	2031.0	2187.0	2295.0	2346.0	2358.0
52.5°	158.4	189.6	521.4	1617.6	1821.0	1968.6	2117.4	2215.8	2262.0	2266.8
55°	144.0	171.0	429.0	1503.0	1707.0	1860.0	2004.0	2082.0	2115.0	2127.0
57.5°	136.2	157.2	356.4	1378.8	1578.6	1732.2	1863.0	1923.6	1950.0	1954.2
60°	129.0	150.0	318.0	1290.0	1497.0	1641.0	1755.0	1806.0	1830.0	1839.0
62.5°	121.8	145.2	289.2	1198.8	1401.0	1540.2	1639.8	1683.6	1702.8	1704.6
65°	114.0	138.0	255.0	1059.0	1251.0	1380.0	1458.0	1494.0	1503.0	1509.0
67.5°	106.2	130.8	230.4	918.0	1096.2	1203.0	1260.6	1291.8	1293.6	1306.2
70°	99.0	126.0	216.0	822.0	981.0	1083.0	1131.0	1155.0	1152.0	1155.0
72.5°	94.2	118.8	206.4	723.6	870.6	951.0	994.2	1011.0	1012.8	1013.4
75°	84.0	105.0	192.0	573.0	690.0	759.0	792.0	789.0	798.0	801.0
77.5°	72.6	90.6	157.8	422.4	517.2	562.8	589.2	597.6	594.6	595.2
80°	63.0	81.0	129.0	324.0	402.0	438.0	462.0	468.0	465.0	468.0
82.5°	51.0	66.6	100.2	240.0	301.2	330.0	346.8	348.0	349.8	355.2
85°	30.0	39.0	60.0	132.0	168.0	183.0	195.0	198.0	201.0	201.0
87.5°	12.0	16.8	31.2	55.2	69.6	74.4	74.4	69.6	74.4	67.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)