

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-935-1D-UNV-STD-W-4

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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

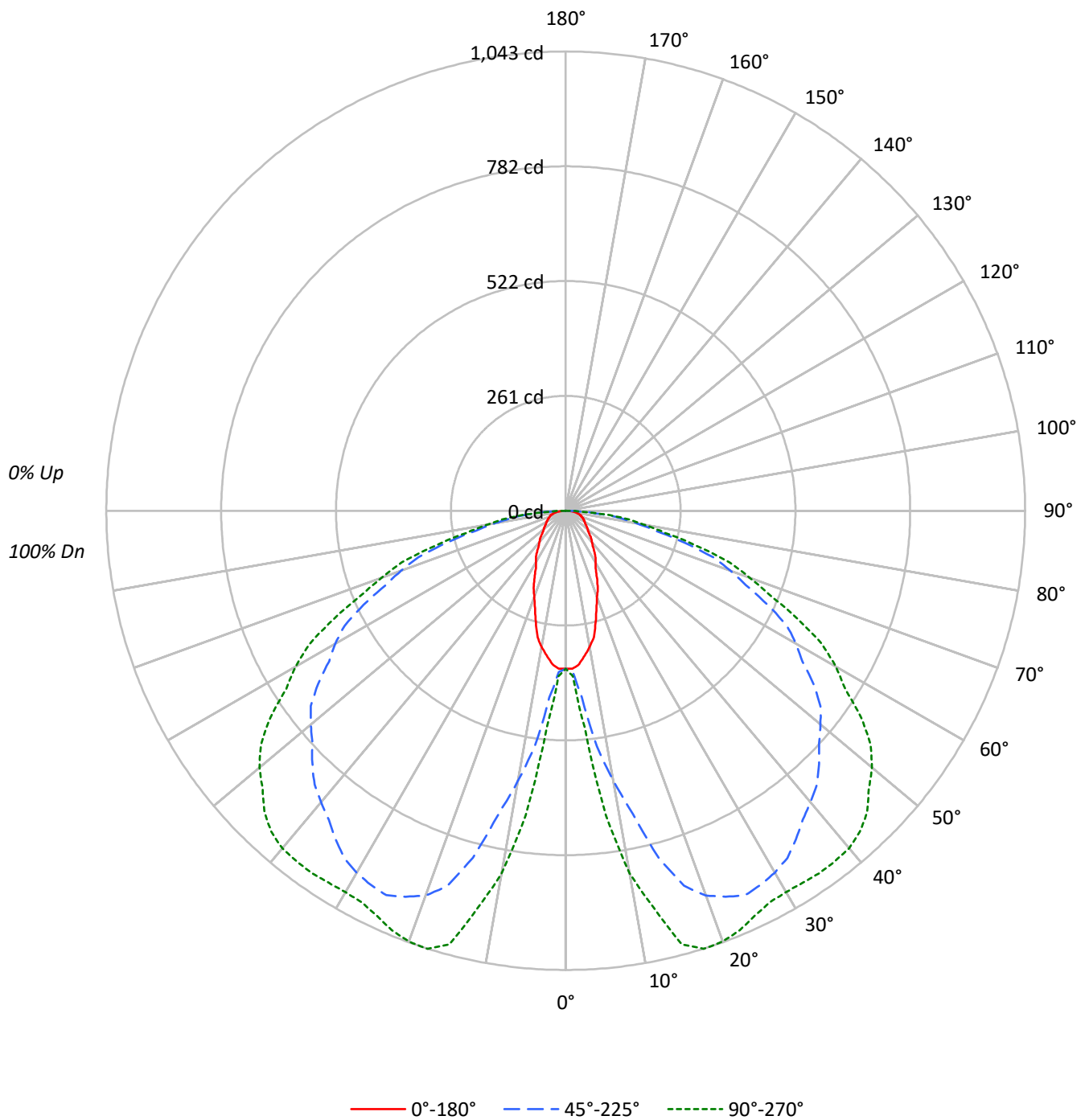
Lumens per Lamp: N/A
Luminaire Lumens: 2778.9 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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°	3313	3313	3313
5°	3240	3940	4587
10°	2943	5831	7831
15°	2503	7791	9738
20°	2040	9132	10225
25°	1704	9808	10332
30°	1439	10111	10652
35°	1275	10261	11314
40°	1113	10408	12056
45°	1010	10613	12625
50°	929	10839	13026
55°	891	11042	13168
60°	915	11142	13061
65°	958	11053	12679
70°	1028	10715	11991
75°	1151	9940	10990
80°	1286	8589	9569
85°	1217	7151	8193

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13222 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.1	1.7
10°-20°	205.1	7.4
20°-30°	359.5	12.9
30°-40°	462.9	16.7
40°-50°	516.8	18.6
50°-60°	495.6	17.8
60°-70°	394.4	14.2
70°-80°	232.4	8.4
80°-90°	65.1	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°	611.7	22.0
0°-40°	1074.6	38.7
0°-60°	2087.0	75.1
0°-90°	2778.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2778.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	359	359	359	359	359	
5°	350	375	425	480	495	32
15°	262	481	816	986	1020	73
25°	167	546	964	1013	1015	77
35°	113	512	911	966	1004	71
45°	77	402	813	924	968	60
55°	55	268	686	794	819	51
65°	44	175	506	572	581	43
75°	32	111	279	304	308	34
85°	12	30	68	76	77	13
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	359.1	359.1	359.1	359.1	359.1	359.1	359.1	359.1	359.1	359.1
2.5°	359.1	359.1	360.9	363.7	364.6	368.3	373.9	376.6	378.5	376.6
5°	349.8	354.5	369.5	391.4	413.3	437.6	468.8	483.8	493.0	495.3
7.5°	331.6	344.3	387.0	444.3	508.0	571.3	626.0	670.4	696.2	697.4
10°	314.1	336.0	401.8	489.6	577.3	667.4	742.4	788.6	825.5	835.9
12.5°	294.7	327.7	417.5	534.8	654.9	756.0	839.4	890.2	919.8	923.7
15°	262.1	310.6	439.9	606.2	755.1	876.3	956.0	996.4	1014.9	1019.5
17.5°	231.8	295.3	459.5	662.0	838.5	947.7	1008.2	1033.6	1042.8	1043.3
20°	207.8	280.6	468.8	700.8	881.0	979.1	1023.0	1039.1	1043.8	1041.4
22.5°	190.3	264.9	474.3	726.7	906.8	991.1	1023.9	1031.7	1033.6	1031.3
25°	167.4	239.0	474.5	760.9	932.9	994.1	1011.4	1013.7	1016.0	1014.9
27.5°	147.1	210.1	467.6	783.5	936.6	980.0	988.1	993.9	1001.0	1002.7
30°	135.1	191.7	458.4	790.9	932.9	965.2	973.3	983.7	996.4	999.9
32.5°	125.9	174.1	444.5	791.8	923.7	947.7	958.5	978.2	996.4	1001.7
35°	113.2	147.8	421.4	785.1	902.9	919.1	942.2	974.5	998.7	1004.5
37.5°	100.7	128.9	390.0	771.5	875.6	892.5	930.6	969.6	996.7	1003.8
40°	92.4	117.8	366.0	758.6	854.4	874.0	921.4	964.1	993.0	1001.0
42.5°	85.9	108.5	340.1	741.9	830.4	857.4	910.3	955.8	982.8	989.0
45°	77.4	94.7	299.0	711.2	793.2	833.6	891.4	935.2	960.6	967.6
47.5°	69.3	85.0	256.1	676.1	755.3	804.8	863.9	905.4	928.8	933.4
50°	64.7	78.5	227.5	651.2	728.6	781.7	841.7	883.3	902.9	907.5
52.5°	61.0	73.0	200.7	622.6	700.8	757.6	814.9	852.8	870.6	872.4
55°	55.4	65.8	165.1	578.5	657.0	715.9	771.3	801.3	814.0	818.6
57.5°	52.4	60.5	137.2	530.7	607.6	666.7	717.0	740.3	750.5	752.1
60°	49.6	57.7	122.4	496.5	576.1	631.6	675.4	695.1	704.3	707.8
62.5°	46.9	55.9	111.3	461.4	539.2	592.8	631.1	648.0	655.4	656.0
65°	43.9	53.1	98.1	407.6	481.5	531.1	561.1	575.0	578.5	580.8
67.5°	40.9	50.3	88.7	353.3	421.9	463.0	485.2	497.2	497.9	502.7
70°	38.1	48.5	83.1	316.4	377.6	416.8	435.3	444.5	443.4	444.5
72.5°	36.3	45.7	79.4	278.5	335.1	366.0	382.6	389.1	389.8	390.0
75°	32.3	40.4	73.9	220.5	265.6	292.1	304.8	303.7	307.1	308.3
77.5°	27.9	34.9	60.7	162.6	199.1	216.6	226.8	230.0	228.8	229.1
80°	24.2	31.2	49.6	124.7	154.7	168.6	177.8	180.1	179.0	180.1
82.5°	19.6	25.6	38.6	92.4	115.9	127.0	133.5	133.9	134.6	136.7
85°	11.5	15.0	23.1	50.8	64.7	70.4	75.0	76.2	77.4	77.4
87.5°	4.6	6.5	12.0	21.2	26.8	28.6	28.6	26.8	28.6	25.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)