

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-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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

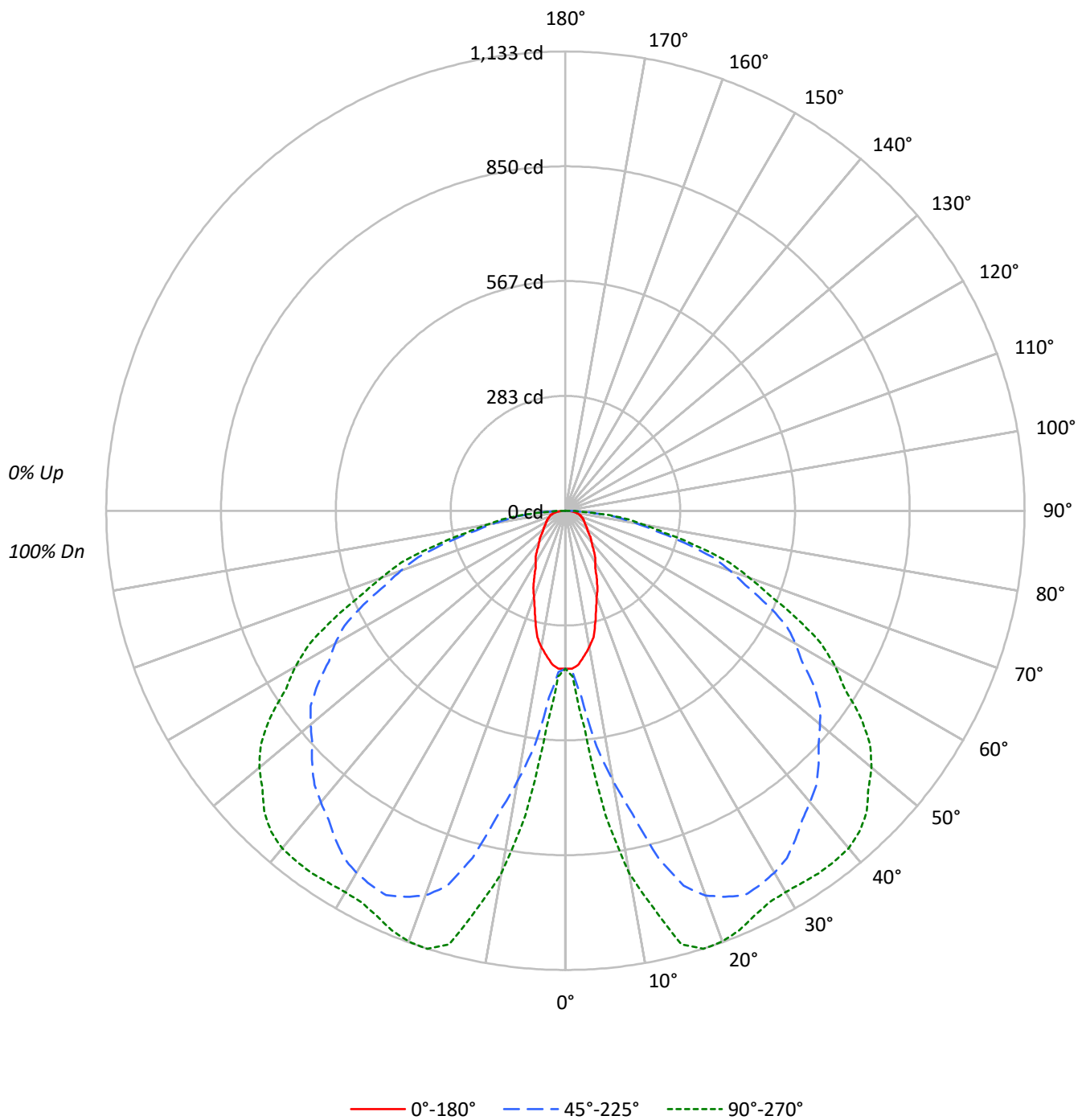
Lumens per Lamp: N/A
Luminaire Lumens: 3018.7 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3599	3599	3599
5°	3519	4281	4984
10°	3197	6334	8508
15°	2719	8464	10578
20°	2217	9919	11107
25°	1852	10655	11223
30°	1563	10984	11572
35°	1384	11146	12290
40°	1208	11307	13097
45°	1096	11530	13715
50°	1008	11773	14150
55°	968	11994	14305
60°	995	12105	14188
65°	1041	12007	13773
70°	1117	11639	13027
75°	1251	10798	11938
80°	1397	9330	10398
85°	1323	7765	8892

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°	51.2	1.7
10°-20°	222.8	7.4
20°-30°	390.5	12.9
30°-40°	502.8	16.7
40°-50°	561.4	18.6
50°-60°	538.4	17.8
60°-70°	428.4	14.2
70°-80°	252.4	8.4
80°-90°	70.7	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°	664.5	22.0
0°-40°	1167.4	38.7
0°-60°	2267.1	75.1
0°-90°	3018.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3018.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	390	390	390	390	390	
5°	380	407	462	521	538	35
15°	285	523	886	1071	1108	79
25°	182	593	1047	1101	1102	84
35°	123	557	990	1050	1091	77
45°	84	437	884	1004	1051	65
55°	60	292	746	862	889	55
65°	48	191	550	621	631	47
75°	35	120	303	330	335	37
85°	12	33	73	82	84	14
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	390.1	390.1	390.1	390.1	390.1	390.1	390.1	390.1	390.1	390.1
2.5°	390.1	390.1	392.1	395.1	396.1	400.1	406.1	409.1	411.1	409.1
5°	380.0	385.1	401.4	425.2	449.0	475.4	509.2	525.5	535.6	538.1
7.5°	360.2	374.0	420.4	482.6	551.9	620.6	680.1	728.2	756.3	757.6
10°	341.2	365.0	436.5	531.8	627.1	725.0	806.5	856.7	896.8	908.1
12.5°	320.1	356.0	453.5	581.0	711.4	821.3	911.8	967.0	999.1	1003.4
15°	284.7	337.4	477.9	658.5	820.3	952.0	1038.5	1082.4	1102.5	1107.5
17.5°	251.9	320.8	499.2	719.2	910.8	1029.5	1095.2	1122.8	1132.8	1133.3
20°	225.8	304.8	509.2	761.3	957.0	1063.6	1111.3	1128.8	1133.9	1131.3
22.5°	206.7	287.7	515.2	789.4	985.1	1076.7	1112.3	1120.8	1122.8	1120.3
25°	181.9	259.6	515.5	826.6	1013.4	1079.9	1098.7	1101.2	1103.7	1102.5
27.5°	159.8	228.3	508.0	851.1	1017.5	1064.6	1073.4	1079.7	1087.4	1089.2
30°	146.7	208.2	497.9	859.2	1013.4	1048.6	1057.3	1068.6	1082.4	1086.2
32.5°	136.7	189.1	482.9	860.2	1003.4	1029.5	1041.3	1062.6	1082.4	1088.2
35°	122.9	160.5	457.8	852.9	980.8	998.4	1023.5	1058.6	1084.9	1091.2
37.5°	109.4	140.0	423.7	838.1	951.2	969.5	1010.9	1053.3	1082.7	1090.5
40°	100.3	127.9	397.6	824.0	928.2	949.5	1000.9	1047.3	1078.7	1087.4
42.5°	93.3	117.9	369.5	806.0	902.1	931.4	988.9	1038.3	1067.6	1074.4
45°	84.0	102.8	324.9	772.6	861.7	905.6	968.3	1016.0	1043.5	1051.1
47.5°	75.3	92.3	278.2	734.5	820.5	874.2	938.4	983.6	1008.9	1013.9
50°	70.2	85.3	247.1	707.4	791.4	849.1	914.4	959.5	980.8	985.8
52.5°	66.2	79.3	218.0	676.3	761.3	823.0	885.3	926.4	945.7	947.7
55°	60.2	71.5	179.4	628.4	713.7	777.6	837.8	870.5	884.3	889.3
57.5°	56.9	65.7	149.0	576.5	660.0	724.2	778.9	804.2	815.3	817.0
60°	53.9	62.7	133.0	539.3	625.9	686.1	733.7	755.1	765.1	768.9
62.5°	50.9	60.7	120.9	501.2	585.7	643.9	685.6	703.9	711.9	712.7
65°	47.7	57.7	106.6	442.8	523.0	577.0	609.6	624.6	628.4	630.9
67.5°	44.4	54.7	96.3	383.8	458.3	503.0	527.0	540.1	540.8	546.1
70°	41.4	52.7	90.3	343.7	410.1	452.8	472.9	482.9	481.6	482.9
72.5°	39.4	49.7	86.3	302.5	364.0	397.6	415.7	422.7	423.4	423.7
75°	35.1	43.9	80.3	239.6	288.5	317.3	331.1	329.9	333.6	334.9
77.5°	30.4	37.9	66.0	176.6	216.2	235.3	246.3	249.8	248.6	248.8
80°	26.3	33.9	53.9	135.5	168.1	183.1	193.2	195.7	194.4	195.7
82.5°	21.3	27.8	41.9	100.3	125.9	138.0	145.0	145.5	146.2	148.5
85°	12.5	16.3	25.1	55.2	70.2	76.5	81.5	82.8	84.0	84.0
87.5°	5.0	7.0	13.0	23.1	29.1	31.1	31.1	29.1	31.1	28.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)