

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-835-1D-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-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

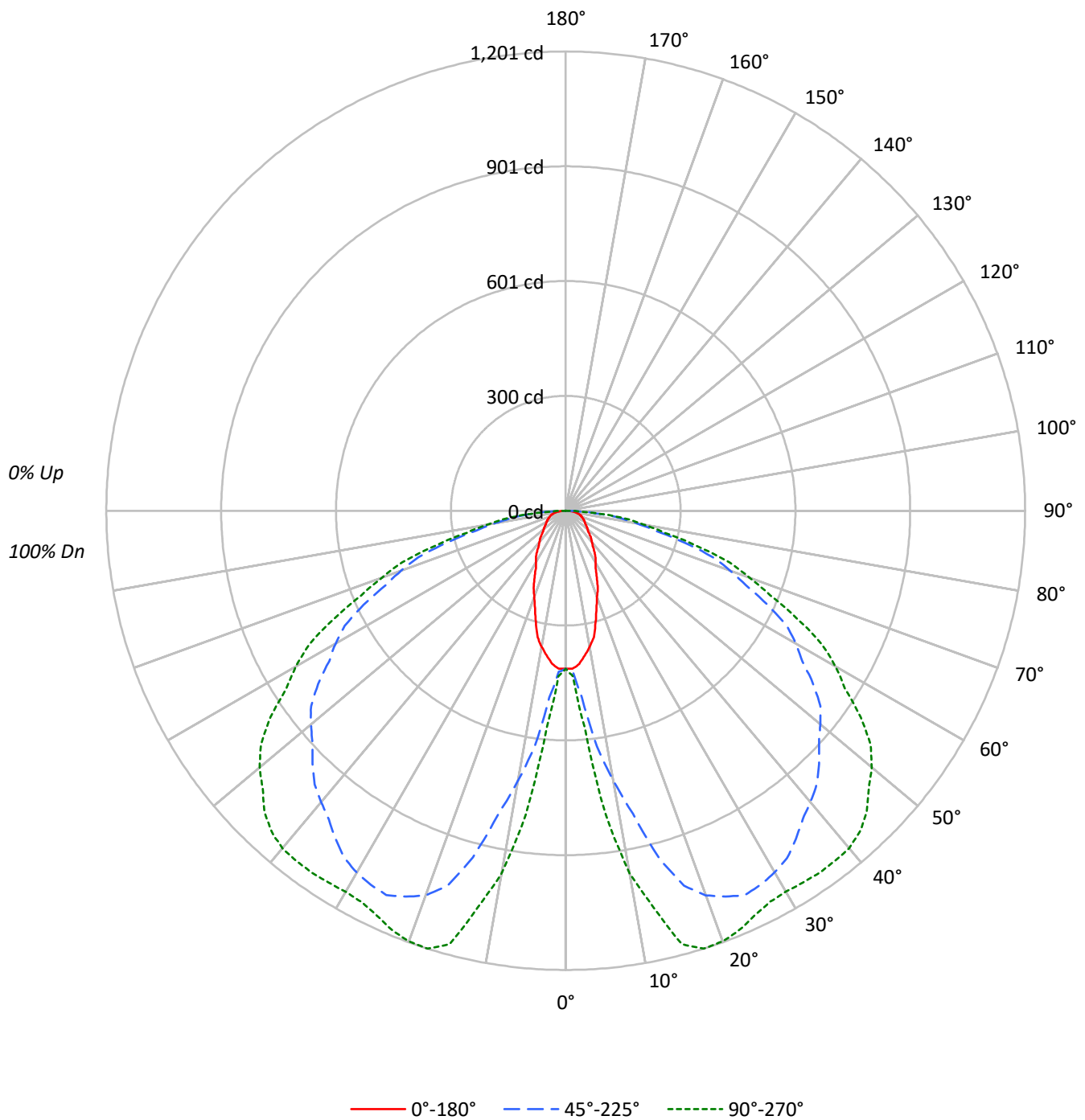
Lumens per Lamp: N/A
Luminaire Lumens: 3198.2 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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
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°	3813	3813	3813
5°	3729	4535	5280
10°	3386	6710	9013
15°	2881	8967	11207
20°	2349	10509	11768
25°	1962	11289	11890
30°	1657	11637	12260
35°	1466	11808	13021
40°	1280	11979	13876
45°	1161	12215	14529
50°	1068	12474	14991
55°	1026	12707	15154
60°	1054	12824	15031
65°	1102	12721	14592
70°	1184	12331	13801
75°	1326	11439	12648
80°	1482	9885	11014
85°	1408	8231	9421

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 15218 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.7
10°-20°	236.1	7.4
20°-30°	413.7	12.9
30°-40°	532.7	16.7
40°-50°	594.8	18.6
50°-60°	570.4	17.8
60°-70°	453.9	14.2
70°-80°	267.4	8.4
80°-90°	75.0	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°	704.0	22.0
0°-40°	1236.7	38.7
0°-60°	2401.9	75.1
0°-90°	3198.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3198.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	403	432	490	552	570	37
15°	302	554	939	1135	1173	84
25°	193	628	1109	1166	1168	89
35°	130	590	1048	1112	1156	81
45°	89	463	936	1064	1114	69
55°	64	309	790	914	942	58
65°	50	202	583	658	668	50
75°	37	127	321	350	355	39
85°	13	35	78	87	89	15
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	413.3	413.3	413.3	413.3	413.3	413.3	413.3	413.3	413.3	413.3
2.5°	413.3	413.3	415.4	418.6	419.6	423.9	430.3	433.5	435.6	433.5
5°	402.6	407.9	425.2	450.5	475.7	503.6	539.5	556.8	567.4	570.1
7.5°	381.6	396.3	445.4	511.3	584.7	657.5	720.5	771.5	801.3	802.6
10°	361.4	386.7	462.4	563.4	664.4	768.1	854.4	907.6	950.1	962.1
12.5°	339.1	377.1	480.5	615.5	753.7	870.1	966.0	1024.5	1058.5	1063.1
15°	301.6	357.5	506.3	697.6	869.0	1008.6	1100.3	1146.8	1168.0	1173.3
17.5°	266.8	339.9	528.9	761.9	965.0	1090.7	1160.3	1189.6	1200.2	1200.7
20°	239.2	322.9	539.5	806.6	1013.9	1126.8	1177.3	1195.9	1201.3	1198.6
22.5°	219.0	304.8	545.9	836.4	1043.7	1140.7	1178.4	1187.4	1189.6	1186.9
25°	192.7	275.1	546.1	875.7	1073.7	1144.1	1164.0	1166.7	1169.4	1168.0
27.5°	169.3	241.8	538.2	901.7	1077.9	1127.9	1137.2	1143.8	1152.1	1153.9
30°	155.5	220.6	527.5	910.2	1073.7	1110.9	1120.2	1132.2	1146.8	1150.8
32.5°	144.8	200.4	511.6	911.3	1063.1	1090.7	1103.2	1125.8	1146.8	1152.9
35°	130.2	170.1	485.0	903.6	1039.1	1057.7	1084.3	1121.5	1149.4	1156.1
37.5°	115.9	148.3	448.9	887.9	1007.8	1027.2	1071.0	1115.9	1147.0	1155.3
40°	106.3	135.5	421.2	873.0	983.3	1005.9	1060.4	1109.6	1142.8	1152.1
42.5°	98.9	124.9	391.5	853.9	955.7	986.8	1047.6	1100.0	1131.1	1138.3
45°	89.0	109.0	344.2	818.6	912.9	959.4	1025.8	1076.3	1105.6	1113.5
47.5°	79.7	97.8	294.7	778.2	869.3	926.2	994.2	1042.1	1068.9	1074.2
50°	74.4	90.4	261.8	749.5	838.5	899.6	968.7	1016.5	1039.1	1044.4
52.5°	70.2	84.0	230.9	716.5	806.6	872.0	937.9	981.5	1001.9	1004.1
55°	63.8	75.7	190.0	665.7	756.1	823.9	887.6	922.2	936.8	942.1
57.5°	60.3	69.6	157.9	610.7	699.2	767.3	825.2	852.0	863.7	865.6
60°	57.1	66.4	140.9	571.4	663.1	726.9	777.4	799.9	810.6	814.6
62.5°	53.9	64.3	128.1	531.0	620.6	682.2	726.3	745.7	754.2	755.0
65°	50.5	61.1	112.9	469.1	554.1	611.3	645.8	661.8	665.7	668.4
67.5°	47.0	57.9	102.1	406.6	485.5	532.9	558.4	572.2	573.0	578.6
70°	43.9	55.8	95.7	364.1	434.5	479.7	501.0	511.6	510.3	511.6
72.5°	41.7	52.6	91.4	320.5	385.6	421.2	440.4	447.8	448.6	448.9
75°	37.2	46.5	85.0	253.8	305.6	336.2	350.8	349.5	353.5	354.8
77.5°	32.2	40.1	69.9	187.1	229.1	249.3	261.0	264.7	263.4	263.6
80°	27.9	35.9	57.1	143.5	178.1	194.0	204.6	207.3	206.0	207.3
82.5°	22.6	29.5	44.4	106.3	133.4	146.2	153.6	154.1	154.9	157.3
85°	13.3	17.3	26.6	58.5	74.4	81.1	86.4	87.7	89.0	89.0
87.5°	5.3	7.4	13.8	24.5	30.8	33.0	33.0	30.8	33.0	29.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)