

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-050D-930-1D-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-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

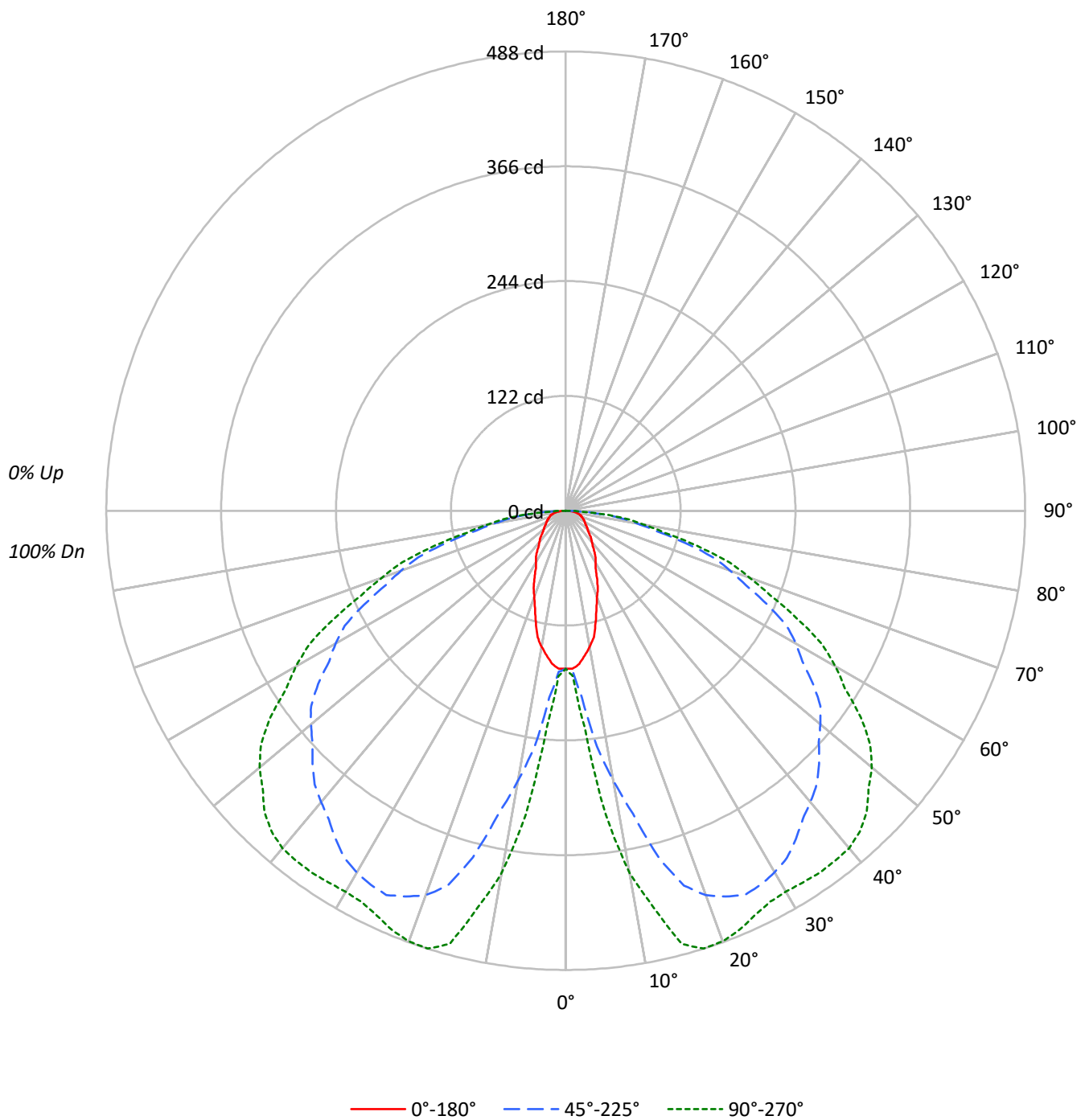
Lumens per Lamp: N/A
Luminaire Lumens: 1299.4 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
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	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°	1549	1549	1549
5°	1515	1843	2145
10°	1375	2726	3662
15°	1171	3643	4553
20°	954	4269	4782
25°	797	4586	4831
30°	673	4727	4981
35°	596	4798	5290
40°	520	4867	5638
45°	472	4963	5903
50°	433	5068	6092
55°	417	5163	6157
60°	428	5210	6108
65°	448	5167	5929
70°	480	5009	5608
75°	538	4648	5137
80°	600	4014	4474
85°	572	3340	3832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6182 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.0	1.7
10°-20°	95.9	7.4
20°-30°	168.1	12.9
30°-40°	216.4	16.7
40°-50°	241.7	18.6
50°-60°	231.7	17.8
60°-70°	184.4	14.2
70°-80°	108.6	8.4
80°-90°	30.5	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°	286.0	22.0
0°-40°	502.5	38.7
0°-60°	975.9	75.1
0°-90°	1299.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1299.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	168	168	168	168	168	
5°	164	175	199	224	232	15
15°	123	225	381	461	477	34
25°	78	255	450	474	475	36
35°	53	240	426	452	470	33
45°	36	188	380	432	452	28
55°	26	126	321	371	383	24
65°	20	82	237	267	272	20
75°	15	52	130	142	144	16
85°	5	14	32	35	36	6
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9
2.5°	167.9	167.9	168.8	170.1	170.5	172.2	174.8	176.1	177.0	176.1
5°	163.6	165.7	172.8	183.0	193.3	204.6	219.2	226.2	230.5	231.6
7.5°	155.1	161.0	181.0	207.7	237.6	267.1	292.7	313.5	325.6	326.1
10°	146.8	157.1	187.9	228.9	269.9	312.1	347.1	368.7	386.0	390.9
12.5°	137.8	153.2	195.2	250.1	306.2	353.5	392.5	416.3	430.1	431.9
15°	122.6	145.2	205.7	283.4	353.1	409.8	447.0	465.9	474.6	476.7
17.5°	108.4	138.1	214.9	309.6	392.1	443.1	471.4	483.3	487.6	487.8
20°	97.2	131.2	219.2	327.7	411.9	457.8	478.3	485.9	488.1	487.0
22.5°	89.0	123.9	221.8	339.8	424.0	463.4	478.8	482.4	483.3	482.2
25°	78.3	111.8	221.9	355.8	436.2	464.8	472.9	474.0	475.1	474.6
27.5°	68.8	98.3	218.7	366.4	438.0	458.3	462.0	464.7	468.1	468.8
30°	63.2	89.6	214.3	369.8	436.2	451.3	455.1	460.0	465.9	467.5
32.5°	58.8	81.4	207.9	370.3	431.9	443.1	448.2	457.4	465.9	468.4
35°	52.9	69.1	197.1	367.1	422.2	429.8	440.5	455.7	467.0	469.7
37.5°	47.1	60.3	182.4	360.8	409.5	417.3	435.1	453.4	466.0	469.4
40°	43.2	55.1	171.1	354.7	399.5	408.7	430.8	450.8	464.3	468.1
42.5°	40.2	50.7	159.1	346.9	388.3	400.9	425.6	446.9	459.6	462.5
45°	36.2	44.3	139.8	332.6	370.9	389.8	416.8	437.3	449.2	452.4
47.5°	32.4	39.7	119.7	316.2	353.2	376.3	403.9	423.4	434.3	436.4
50°	30.2	36.7	106.4	304.5	340.7	365.5	393.6	413.0	422.2	424.4
52.5°	28.5	34.1	93.8	291.1	327.7	354.3	381.1	398.8	407.1	407.9
55°	25.9	30.8	77.2	270.5	307.2	334.7	360.6	374.7	380.6	382.8
57.5°	24.5	28.3	64.1	248.1	284.1	311.7	335.3	346.2	350.9	351.7
60°	23.2	27.0	57.2	232.2	269.4	295.3	315.8	325.0	329.3	331.0
62.5°	21.9	26.1	52.0	215.7	252.1	277.2	295.1	303.0	306.4	306.8
65°	20.5	24.8	45.9	190.6	225.1	248.3	262.4	268.9	270.5	271.6
67.5°	19.1	23.5	41.5	165.2	197.3	216.5	226.9	232.5	232.8	235.1
70°	17.8	22.7	38.9	147.9	176.5	194.9	203.5	207.9	207.3	207.9
72.5°	17.0	21.4	37.1	130.2	156.7	171.1	178.9	181.9	182.3	182.4
75°	15.1	18.9	34.6	103.1	124.2	136.6	142.5	142.0	143.6	144.1
77.5°	13.1	16.3	28.4	76.0	93.1	101.3	106.0	107.5	107.0	107.1
80°	11.3	14.6	23.2	58.3	72.3	78.8	83.1	84.2	83.7	84.2
82.5°	9.2	12.0	18.0	43.2	54.2	59.4	62.4	62.6	63.0	63.9
85°	5.4	7.0	10.8	23.8	30.2	32.9	35.1	35.6	36.2	36.2
87.5°	2.2	3.0	5.6	9.9	12.5	13.4	13.4	12.5	13.4	12.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)