

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-940-1D-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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

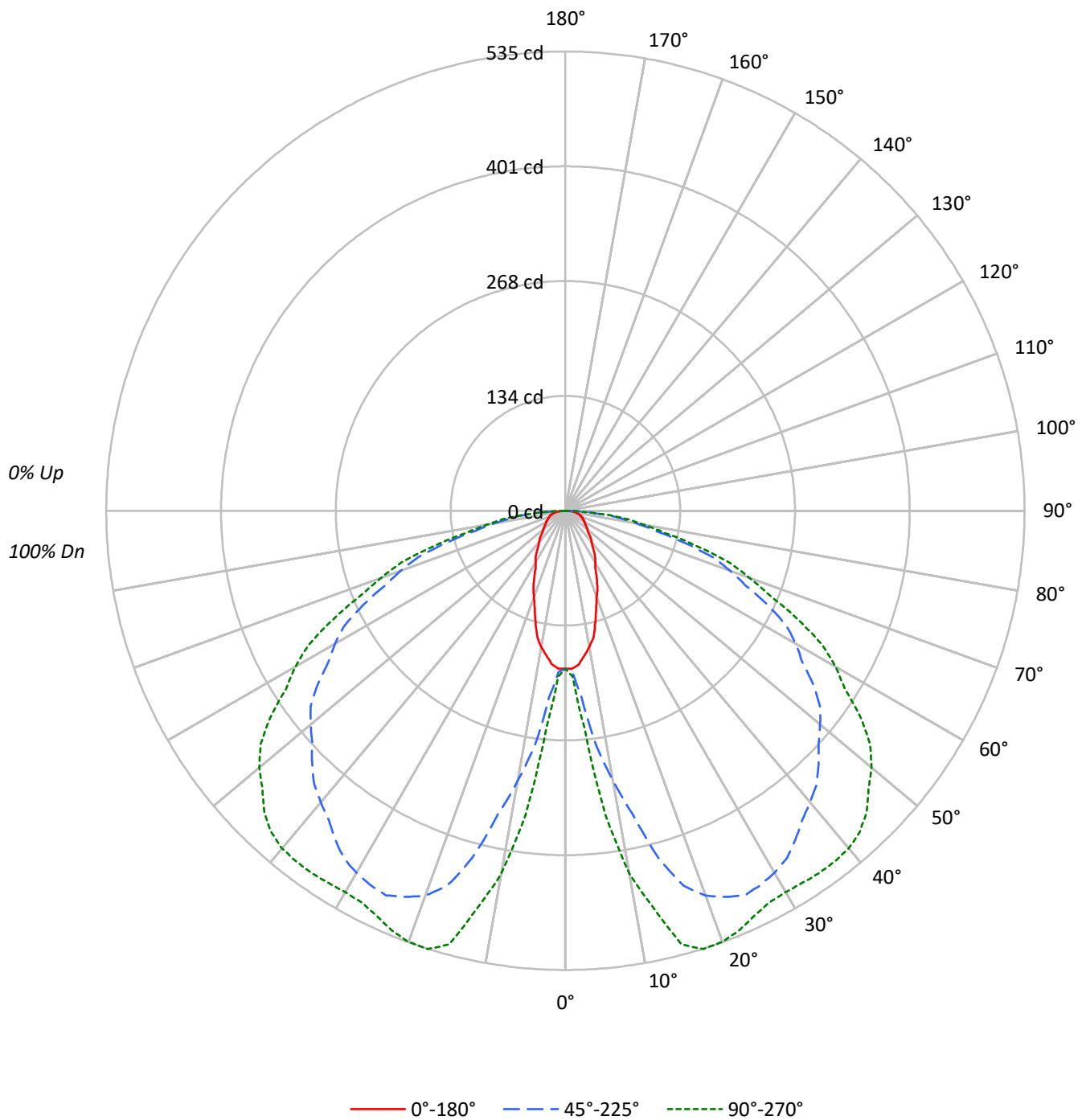
Lumens per Lamp: N/A
Luminaire Lumens: 1425.8 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	1699	1699	1699
5°	1662	2022	2353
10°	1509	2991	4018
15°	1285	3997	4996
20°	1047	4685	5247
25°	874	5033	5301
30°	738	5188	5465
35°	654	5265	5805
40°	571	5341	6186
45°	518	5446	6477
50°	477	5561	6683
55°	457	5665	6756
60°	471	5717	6702
65°	491	5671	6506
70°	526	5498	6153
75°	592	5101	5639
80°	659	4407	4909
85°	625	3668	4203

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.2	1.7
10°-20°	105.3	7.4
20°-30°	184.4	12.9
30°-40°	237.5	16.7
40°-50°	265.2	18.6
50°-60°	254.3	17.8
60°-70°	202.4	14.2
70°-80°	119.2	8.4
80°-90°	33.4	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°	313.9	22.0
0°-40°	551.4	38.7
0°-60°	1070.8	75.1
0°-90°	1425.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1425.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	184	184	184	184	184	
5°	180	192	218	246	254	16
15°	134	247	418	506	523	37
25°	86	280	494	520	521	40
35°	58	263	467	496	515	36
45°	40	206	417	474	496	31
55°	28	138	352	407	420	26
65°	22	90	260	293	298	22
75°	17	57	143	156	158	17
85°	6	15	35	39	40	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2	184.2
2.5°	184.2	184.2	185.2	186.6	187.1	189.0	191.8	193.2	194.2	193.2
5°	179.5	181.9	189.6	200.8	212.1	224.5	240.5	248.2	253.0	254.1
7.5°	170.1	176.7	198.6	228.0	260.7	293.1	321.2	344.0	357.2	357.8
10°	161.1	172.4	206.2	251.2	296.2	342.4	380.9	404.6	423.6	428.9
12.5°	151.2	168.1	214.2	274.4	336.0	387.9	430.7	456.8	471.9	473.9
15°	134.5	159.4	225.7	311.0	387.4	449.6	490.5	511.3	520.7	523.1
17.5°	119.0	151.5	235.8	339.7	430.2	486.3	517.3	530.3	535.1	535.3
20°	106.6	144.0	240.5	359.6	452.0	502.4	524.9	533.2	535.5	534.4
22.5°	97.6	135.9	243.4	372.9	465.3	508.5	525.4	529.4	530.3	529.1
25°	85.9	122.6	243.5	390.4	478.7	510.1	519.0	520.1	521.3	520.7
27.5°	75.5	107.8	239.9	402.0	480.6	502.8	507.0	510.0	513.6	514.5
30°	69.3	98.3	235.2	405.8	478.7	495.3	499.4	504.7	511.3	513.0
32.5°	64.6	89.3	228.1	406.3	473.9	486.3	491.8	501.9	511.3	514.0
35°	58.1	75.8	216.2	402.8	463.3	471.6	483.4	500.0	512.4	515.4
37.5°	51.7	66.1	200.1	395.9	449.3	457.9	477.5	497.5	511.4	515.0
40°	47.4	60.4	187.8	389.2	438.4	448.5	472.7	494.7	509.5	513.6
42.5°	44.1	55.7	174.5	380.7	426.1	439.9	467.1	490.4	504.3	507.5
45°	39.7	48.6	153.4	364.9	407.0	427.7	457.3	479.9	492.9	496.4
47.5°	35.5	43.6	131.4	346.9	387.6	412.9	443.2	464.6	476.5	478.9
50°	33.2	40.3	116.7	334.1	373.8	401.1	431.9	453.2	463.3	465.6
52.5°	31.3	37.4	103.0	319.4	359.6	388.7	418.1	437.6	446.7	447.6
55°	28.4	33.8	84.7	296.8	337.1	367.3	395.7	411.1	417.7	420.0
57.5°	26.9	31.0	70.4	272.3	311.7	342.1	367.9	379.9	385.1	385.9
60°	25.5	29.6	62.8	254.7	295.6	324.1	346.6	356.6	361.4	363.2
62.5°	24.1	28.7	57.1	236.7	276.7	304.1	323.8	332.5	336.3	336.6
65°	22.5	27.3	50.4	209.1	247.0	272.5	287.9	295.0	296.8	298.0
67.5°	21.0	25.8	45.5	181.3	216.5	237.6	248.9	255.1	255.5	257.9
70°	19.5	24.9	42.7	162.3	193.7	213.9	223.3	228.1	227.5	228.1
72.5°	18.6	23.5	40.8	142.9	171.9	187.8	196.3	199.6	200.0	200.1
75°	16.6	20.7	37.9	113.2	136.3	149.9	156.4	155.8	157.6	158.2
77.5°	14.3	17.9	31.2	83.4	102.1	111.1	116.4	118.0	117.4	117.5
80°	12.4	16.0	25.5	64.0	79.4	86.5	91.2	92.4	91.8	92.4
82.5°	10.1	13.2	19.8	47.4	59.5	65.2	68.5	68.7	69.1	70.1
85°	5.9	7.7	11.8	26.1	33.2	36.1	38.5	39.1	39.7	39.7
87.5°	2.4	3.3	6.2	10.9	13.7	14.7	14.7	13.7	14.7	13.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)