

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-075D-927-1D-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-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

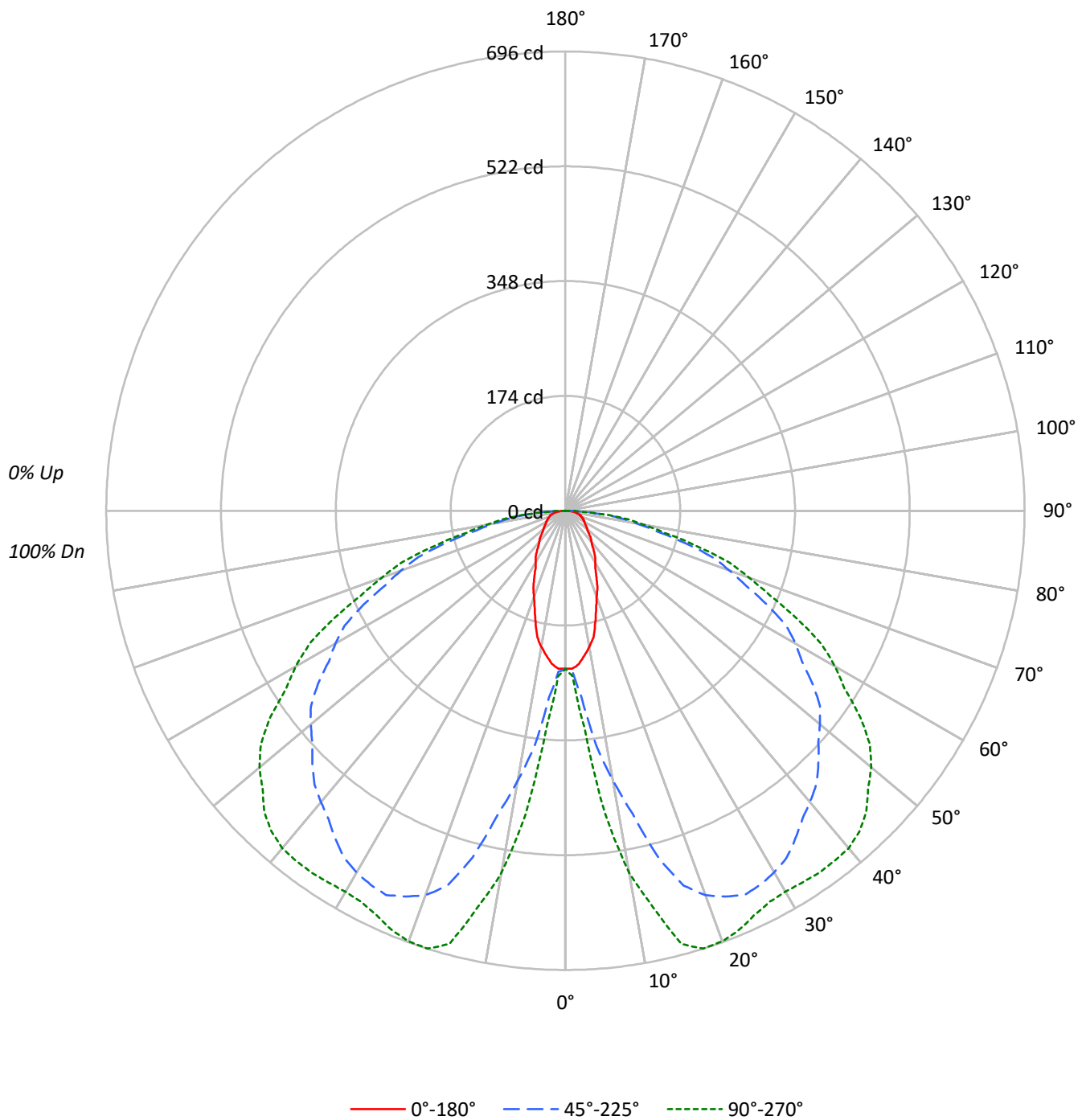
Lumens per Lamp: N/A
Luminaire Lumens: 1853.2 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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°	2210	2210	2210
5°	2161	2628	3059
10°	1962	3888	5223
15°	1670	5196	6494
20°	1361	6090	6819
25°	1136	6542	6890
30°	960	6743	7104
35°	850	6842	7545
40°	742	6942	8041
45°	673	7078	8420
50°	619	7228	8687
55°	595	7363	8781
60°	611	7431	8710
65°	640	7371	8455
70°	685	7146	7996
75°	770	6629	7329
80°	861	5728	6381
85°	815	4769	5462

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 8818 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.4	1.7
10°-20°	136.8	7.4
20°-30°	239.7	12.9
30°-40°	308.7	16.7
40°-50°	344.7	18.6
50°-60°	330.5	17.8
60°-70°	263.0	14.2
70°-80°	155.0	8.4
80°-90°	43.4	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°	408.0	22.0
0°-40°	716.6	38.7
0°-60°	1391.8	75.1
0°-90°	1853.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1853.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	233	250	284	320	330	21
15°	175	321	544	658	680	49
25°	112	364	643	676	677	51
35°	76	342	608	644	670	47
45°	52	268	542	616	645	40
55°	37	179	458	529	546	34
65°	29	117	338	381	387	29
75°	22	74	186	203	206	22
85°	8	20	45	51	52	9
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5
2.5°	239.5	239.5	240.7	242.5	243.2	245.6	249.3	251.2	252.4	251.2
5°	233.3	236.4	246.4	261.0	275.7	291.8	312.6	322.6	328.8	330.3
7.5°	221.1	229.6	258.1	296.3	338.8	381.0	417.5	447.1	464.3	465.1
10°	209.4	224.1	268.0	326.5	385.0	445.1	495.1	525.9	550.5	557.5
12.5°	196.5	218.5	278.4	356.7	436.7	504.2	559.8	593.7	613.4	616.0
15°	174.8	207.1	293.4	404.2	503.6	584.4	637.6	664.5	676.8	679.9
17.5°	154.6	197.0	306.5	441.5	559.2	632.0	672.4	689.3	695.5	695.8
20°	138.6	187.1	312.6	467.4	587.5	653.0	682.2	693.0	696.1	694.5
22.5°	126.9	176.6	316.3	484.6	604.8	661.0	682.8	688.1	689.3	687.8
25°	111.6	159.4	316.5	507.4	622.2	663.0	674.5	676.1	677.6	676.8
27.5°	98.1	140.1	311.8	522.5	624.6	653.6	659.0	662.8	667.6	668.7
30°	90.1	127.8	305.7	527.4	622.2	643.7	649.1	656.0	664.5	666.8
32.5°	83.9	116.1	296.4	528.1	616.0	632.0	639.3	652.3	664.5	668.0
35°	75.5	98.6	281.0	523.6	602.1	612.9	628.3	649.9	666.0	669.9
37.5°	67.1	85.9	260.1	514.5	584.0	595.2	620.6	646.6	664.7	669.4
40°	61.6	78.5	244.1	505.9	569.8	582.9	614.5	642.9	662.2	667.6
42.5°	57.3	72.4	226.8	494.8	553.8	571.8	607.1	637.4	655.4	659.6
45°	51.6	63.1	199.4	474.3	529.0	555.9	594.4	623.7	640.6	645.3
47.5°	46.2	56.7	170.8	450.9	503.7	536.7	576.1	603.8	619.4	622.5
50°	43.1	52.4	151.7	434.3	485.9	521.3	561.3	589.0	602.1	605.2
52.5°	40.7	48.7	133.8	415.2	467.4	505.3	543.5	568.7	580.6	581.8
55°	37.0	43.9	110.1	385.8	438.1	477.4	514.4	534.4	542.8	545.9
57.5°	35.0	40.3	91.5	353.9	405.2	444.6	478.2	493.7	500.5	501.6
60°	33.1	38.5	81.6	331.1	384.2	421.2	450.4	463.5	469.7	472.0
62.5°	31.3	37.3	74.2	307.7	359.6	395.3	420.9	432.1	437.1	437.5
65°	29.3	35.4	65.4	271.8	321.1	354.2	374.2	383.5	385.8	387.3
67.5°	27.3	33.6	59.1	235.6	281.4	308.8	323.6	331.6	332.0	335.3
70°	25.4	32.3	55.4	211.0	251.8	278.0	290.3	296.4	295.7	296.4
72.5°	24.2	30.5	53.0	185.7	223.5	244.1	255.2	259.5	260.0	260.1
75°	21.6	26.9	49.3	147.1	177.1	194.8	203.3	202.5	204.8	205.6
77.5°	18.6	23.3	40.5	108.4	132.7	144.5	151.2	153.4	152.6	152.8
80°	16.2	20.8	33.1	83.2	103.2	112.4	118.6	120.1	119.3	120.1
82.5°	13.1	17.1	25.7	61.6	77.3	84.7	89.0	89.3	89.8	91.2
85°	7.7	10.0	15.4	33.9	43.1	47.0	50.0	50.8	51.6	51.6
87.5°	3.1	4.3	8.0	14.2	17.9	19.1	19.1	17.9	19.1	17.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)