

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-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-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

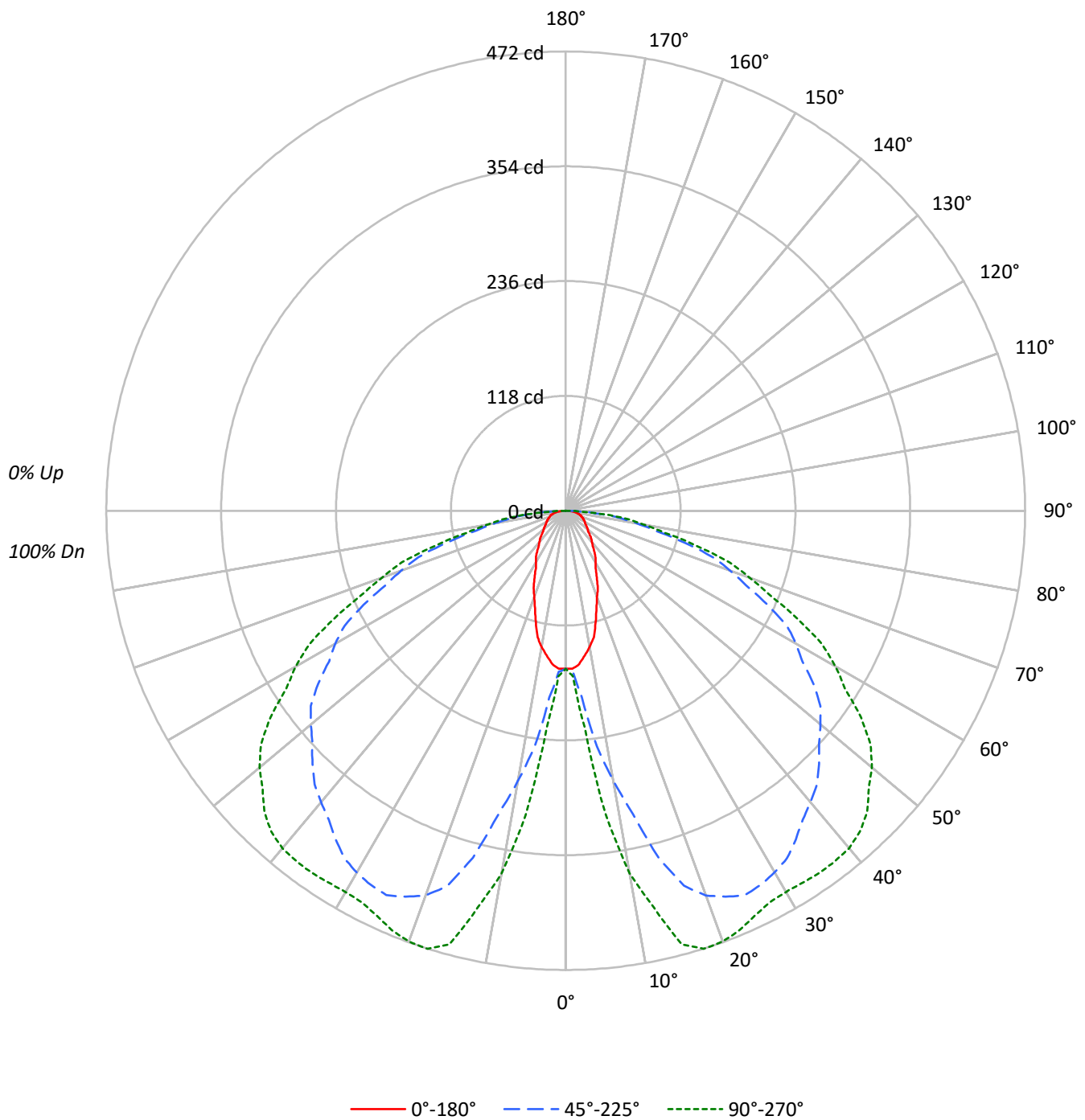
Lumens per Lamp: N/A
Luminaire Lumens: 1257.4 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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
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°	1499	1499	1499
5°	1466	1783	2075
10°	1331	2638	3543
15°	1133	3526	4406
20°	923	4132	4626
25°	771	4438	4675
30°	651	4575	4820
35°	577	4642	5119
40°	503	4710	5455
45°	457	4802	5712
50°	421	4904	5894
55°	404	4996	5958
60°	415	5042	5908
65°	434	5000	5737
70°	464	4848	5425
75°	520	4499	4973
80°	584	3887	4330
85°	550	3239	3705

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 5982 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	1.7
10°-20°	92.8	7.4
20°-30°	162.7	12.9
30°-40°	209.4	16.7
40°-50°	233.8	18.6
50°-60°	224.2	17.8
60°-70°	178.5	14.2
70°-80°	105.1	8.4
80°-90°	29.5	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°	276.8	22.0
0°-40°	486.2	38.7
0°-60°	944.3	75.1
0°-90°	1257.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	162	162	162	162	162	
5°	158	170	192	217	224	15
15°	119	218	369	446	461	33
25°	76	247	436	458	459	35
35°	51	232	412	437	454	32
45°	35	182	368	418	438	27
55°	25	121	311	359	370	23
65°	20	79	229	259	263	20
75°	15	50	126	138	140	15
85°	5	14	31	34	35	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°	162.5	162.5	162.5	162.5	162.5	162.5	162.5	162.5	162.5	162.5
2.5°	162.5	162.5	163.3	164.6	165.0	166.6	169.2	170.4	171.2	170.4
5°	158.3	160.4	167.2	177.1	187.0	198.0	212.1	218.9	223.1	224.1
7.5°	150.0	155.8	175.1	201.0	229.9	258.5	283.3	303.3	315.0	315.5
10°	142.1	152.0	181.8	221.5	261.2	302.0	335.9	356.8	373.5	378.2
12.5°	133.3	148.3	188.9	242.0	296.3	342.1	379.8	402.8	416.2	417.9
15°	118.6	140.5	199.0	274.3	341.7	396.5	432.6	450.8	459.2	461.3
17.5°	104.9	133.6	207.9	299.6	379.4	428.8	456.2	467.7	471.8	472.1
20°	94.0	126.9	212.1	317.1	398.6	443.0	462.9	470.2	472.3	471.2
22.5°	86.1	119.8	214.6	328.8	410.3	448.4	463.3	466.8	467.7	466.6
25°	75.7	108.1	214.7	344.3	422.1	449.8	457.6	458.7	459.7	459.2
27.5°	66.6	95.1	211.6	354.5	423.8	443.4	447.1	449.7	452.9	453.7
30°	61.1	86.7	207.4	357.9	422.1	436.7	440.4	445.1	450.8	452.4
32.5°	56.9	78.8	201.1	358.3	417.9	428.8	433.7	442.6	450.8	453.2
35°	51.2	66.9	190.7	355.2	408.5	415.8	426.3	440.9	451.9	454.5
37.5°	45.6	58.3	176.5	349.1	396.2	403.8	421.1	438.7	450.9	454.2
40°	41.8	53.3	165.6	343.2	386.6	395.5	416.9	436.2	449.3	452.9
42.5°	38.9	49.1	153.9	335.7	375.7	387.9	411.9	432.5	444.7	447.5
45°	35.0	42.8	135.3	321.8	358.9	377.2	403.3	423.2	434.6	437.8
47.5°	31.3	38.4	115.9	305.9	341.8	364.1	390.9	409.7	420.2	422.3
50°	29.3	35.5	102.9	294.6	329.6	353.7	380.8	399.6	408.5	410.6
52.5°	27.6	33.0	90.8	281.7	317.1	342.8	368.7	385.9	393.9	394.7
55°	25.1	29.8	74.7	261.7	297.3	323.9	349.0	362.6	368.3	370.4
57.5°	23.7	27.4	62.1	240.1	274.9	301.6	324.4	335.0	339.6	340.3
60°	22.5	26.1	55.4	224.6	260.7	285.8	305.6	314.5	318.7	320.2
62.5°	21.2	25.3	50.4	208.8	244.0	268.2	285.6	293.2	296.5	296.8
65°	19.9	24.0	44.4	184.4	217.8	240.3	253.9	260.2	261.7	262.8
67.5°	18.5	22.8	40.1	159.9	190.9	209.5	219.5	225.0	225.3	227.5
70°	17.2	21.9	37.6	143.1	170.8	188.6	196.9	201.1	200.6	201.1
72.5°	16.4	20.7	35.9	126.0	151.6	165.6	173.1	176.1	176.4	176.5
75°	14.6	18.3	33.4	99.8	120.2	132.2	137.9	137.4	139.0	139.5
77.5°	12.6	15.8	27.5	73.6	90.1	98.0	102.6	104.1	103.5	103.6
80°	11.0	14.1	22.5	56.4	70.0	76.3	80.5	81.5	81.0	81.5
82.5°	8.9	11.6	17.4	41.8	52.5	57.5	60.4	60.6	60.9	61.9
85°	5.2	6.8	10.4	23.0	29.3	31.9	34.0	34.5	35.0	35.0
87.5°	2.1	2.9	5.4	9.6	12.1	13.0	13.0	12.1	13.0	11.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)