

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-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-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

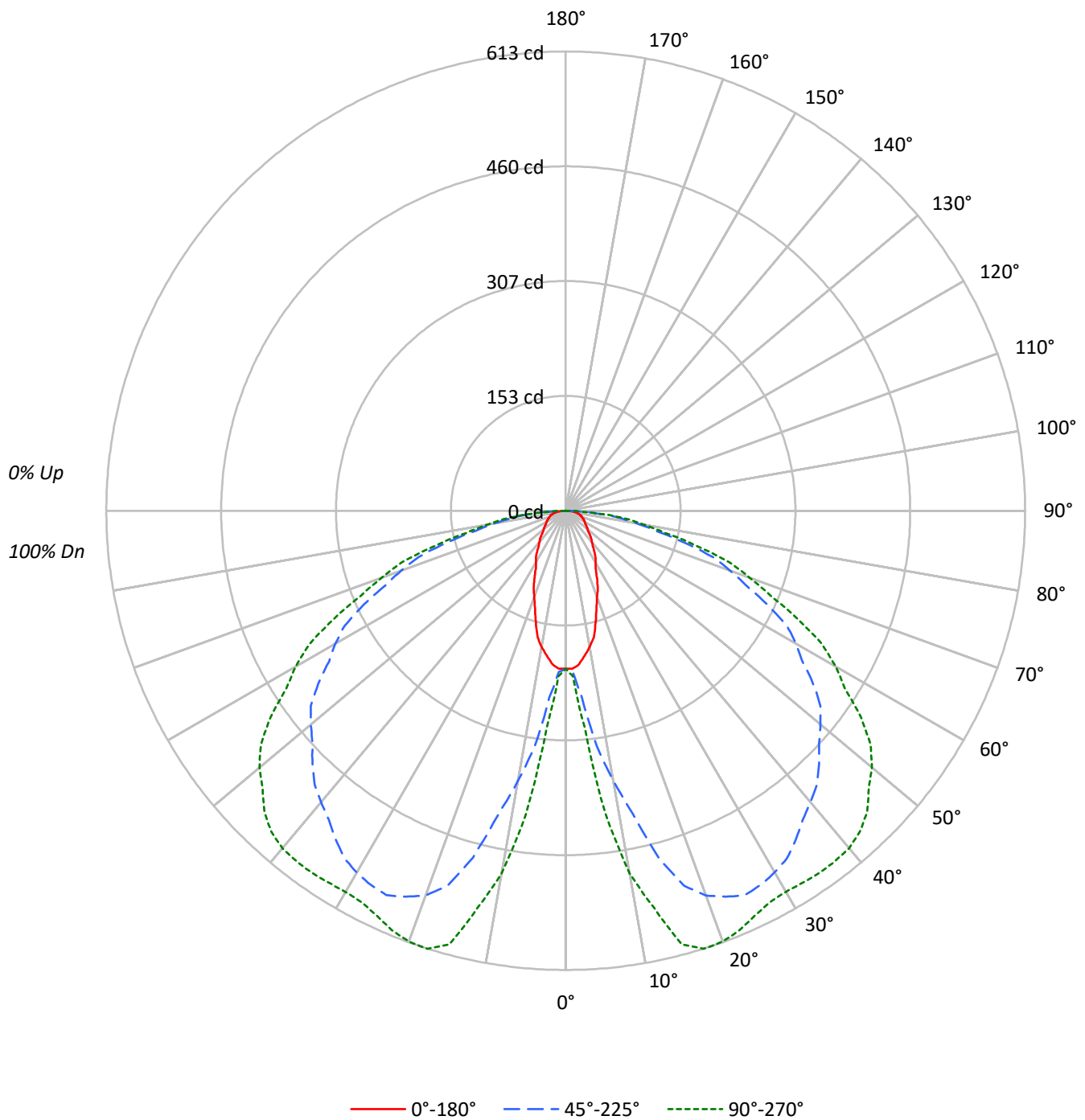
Lumens per Lamp: N/A
Luminaire Lumens: 1632.9 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-835-1D-UNV-STD-W-4

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°	1947	1947	1947
5°	1904	2315	2696
10°	1728	3426	4602
15°	1471	4579	5722
20°	1199	5366	6009
25°	1002	5764	6071
30°	846	5941	6259
35°	749	6030	6649
40°	654	6117	7084
45°	594	6236	7418
50°	545	6369	7655
55°	524	6487	7737
60°	539	6548	7674
65°	563	6495	7451
70°	604	6296	7046
75°	677	5841	6456
80°	754	5048	5621
85°	720	4203	4817

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7769 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.7	1.7
10°-20°	120.5	7.4
20°-30°	211.2	12.9
30°-40°	272.0	16.7
40°-50°	303.7	18.6
50°-60°	291.2	17.8
60°-70°	231.8	14.2
70°-80°	136.5	8.4
80°-90°	38.3	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°	359.5	22.0
0°-40°	631.5	38.7
0°-60°	1226.3	75.1
0°-90°	1632.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1632.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	211	211	211	211	211	
5°	206	220	250	282	291	19
15°	154	283	479	580	599	43
25°	98	321	566	595	596	45
35°	66	301	535	568	590	42
45°	46	236	478	543	568	35
55°	33	158	403	466	481	30
65°	26	103	298	336	341	26
75°	19	65	164	179	181	20
85°	7	18	40	45	46	8
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	211.0	211.0	211.0	211.0	211.0	211.0	211.0	211.0	211.0	211.0
2.5°	211.0	211.0	212.1	213.7	214.3	216.4	219.7	221.3	222.4	221.3
5°	205.6	208.3	217.1	230.0	242.9	257.1	275.5	284.3	289.7	291.1
7.5°	194.9	202.3	227.4	261.1	298.5	335.7	367.9	393.9	409.1	409.8
10°	184.5	197.4	236.1	287.7	339.2	392.1	436.2	463.4	485.1	491.2
12.5°	173.1	192.5	245.3	314.3	384.8	444.3	493.2	523.1	540.5	542.8
15°	154.0	182.5	258.5	356.2	443.7	515.0	561.8	585.5	596.4	599.1
17.5°	136.2	173.5	270.0	389.0	492.7	556.9	592.4	607.4	612.8	613.1
20°	122.1	164.9	275.5	411.8	517.7	575.3	601.1	610.6	613.3	612.0
22.5°	111.8	155.6	278.7	427.0	532.9	582.4	601.7	606.3	607.4	606.0
25°	98.4	140.4	278.8	447.1	548.2	584.2	594.3	595.7	597.0	596.4
27.5°	86.4	123.5	274.8	460.4	550.4	575.9	580.6	584.0	588.2	589.2
30°	79.4	112.6	269.3	464.7	548.2	567.2	571.9	578.0	585.5	587.5
32.5°	74.0	102.3	261.2	465.3	542.8	556.9	563.3	574.8	585.5	588.6
35°	66.5	86.8	247.6	461.4	530.6	540.1	553.6	572.6	586.9	590.3
37.5°	59.2	75.7	229.2	453.3	514.5	524.4	546.8	569.8	585.6	589.9
40°	54.3	69.2	215.1	445.7	502.1	513.6	541.4	566.5	583.5	588.2
42.5°	50.5	63.8	199.9	436.0	487.9	503.8	534.9	561.6	577.5	581.2
45°	45.5	55.6	175.7	417.9	466.1	489.8	523.8	549.6	564.5	568.5
47.5°	40.7	49.9	150.5	397.3	443.8	472.9	507.6	532.0	545.8	548.5
50°	38.0	46.1	133.7	382.7	428.1	459.3	494.6	519.0	530.6	533.3
52.5°	35.8	42.9	117.9	365.8	411.8	445.2	478.9	501.1	511.6	512.6
55°	32.6	38.7	97.0	339.9	386.0	420.6	453.2	470.9	478.3	481.0
57.5°	30.8	35.6	80.6	311.8	357.0	391.7	421.3	435.0	441.0	441.9
60°	29.2	33.9	71.9	291.7	338.6	371.1	396.9	408.4	413.9	415.9
62.5°	27.5	32.8	65.4	271.1	316.8	348.3	370.8	380.8	385.1	385.5
65°	25.8	31.2	57.7	239.5	282.9	312.1	329.7	337.9	339.9	341.3
67.5°	24.0	29.6	52.1	207.6	247.9	272.1	285.1	292.1	292.6	295.4
70°	22.4	28.5	48.8	185.9	221.9	244.9	255.8	261.2	260.5	261.2
72.5°	21.3	26.9	46.7	163.6	196.9	215.1	224.8	228.6	229.0	229.2
75°	19.0	23.7	43.4	129.6	156.0	171.7	179.1	178.4	180.5	181.1
77.5°	16.4	20.5	35.7	95.5	117.0	127.3	133.2	135.1	134.5	134.6
80°	14.2	18.3	29.2	73.3	90.9	99.1	104.5	105.8	105.2	105.8
82.5°	11.5	15.1	22.7	54.3	68.1	74.6	78.4	78.7	79.1	80.3
85°	6.8	8.8	13.6	29.9	38.0	41.4	44.1	44.8	45.5	45.5
87.5°	2.7	3.8	7.1	12.5	15.7	16.8	16.8	15.7	16.8	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)