

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-6

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-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

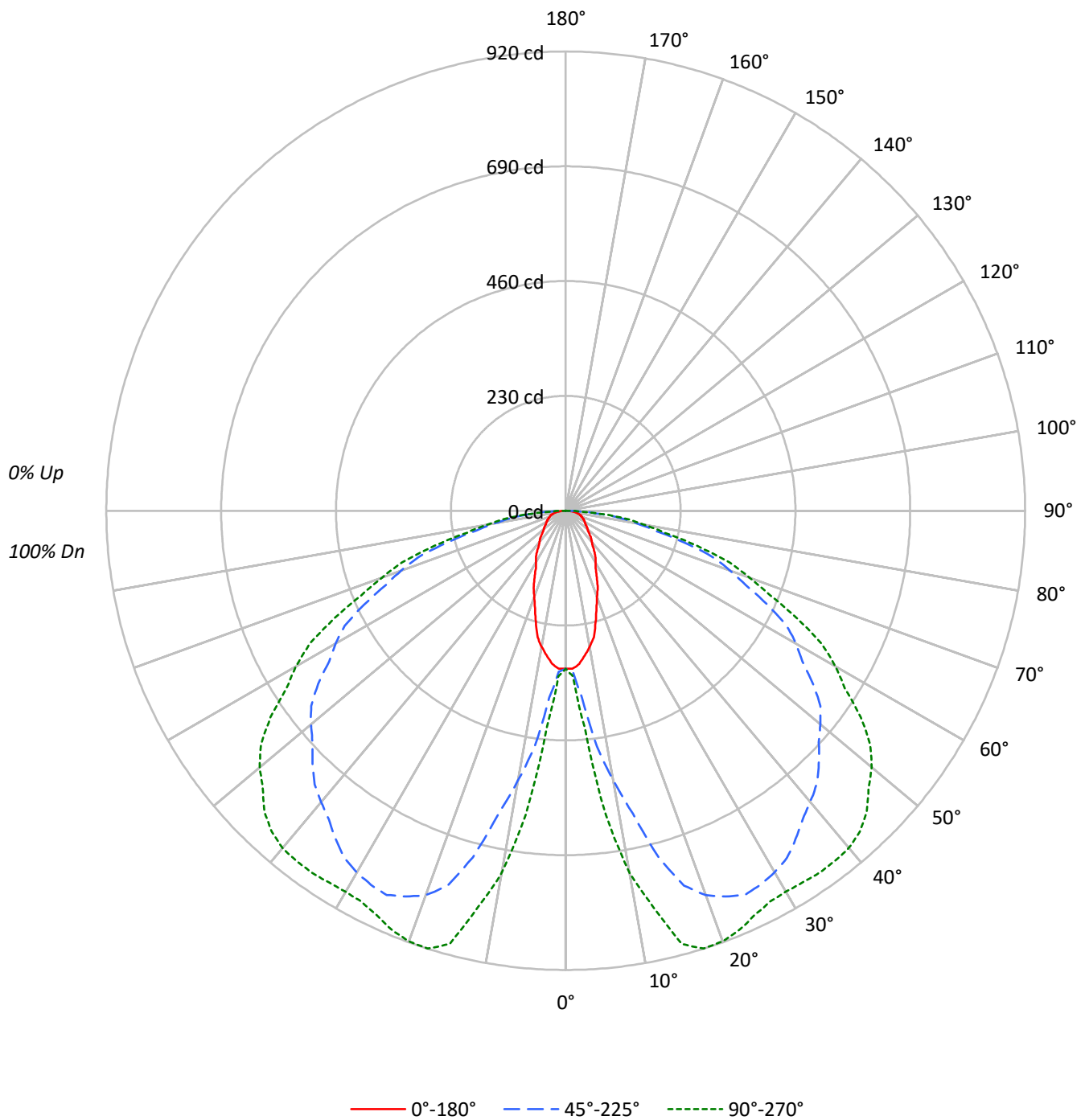
Lumens per Lamp: N/A
Luminaire Lumens: 2449.4 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
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-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-835-1D-UNV-STD-W-6

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82		
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67		
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57	55		
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48	46		
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41	39		
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36	34		
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31	29		
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28	26		
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1947	1947	1947
5°	1904	2315	2696
10°	1729	3426	4602
15°	1471	4578	5722
20°	1199	5366	6009
25°	1002	5764	6071
30°	846	5941	6259
35°	749	6029	6648
40°	654	6116	7084
45°	593	6237	7418
50°	545	6369	7654
55°	523	6488	7737
60°	539	6548	7674
65°	563	6495	7450
70°	604	6296	7046
75°	677	5841	6457
80°	758	5048	5625
85°	720	4203	4813

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7770 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.5	1.7
10°-20°	180.8	7.4
20°-30°	316.9	12.9
30°-40°	408.0	16.7
40°-50°	455.5	18.6
50°-60°	436.8	17.8
60°-70°	347.6	14.2
70°-80°	204.8	8.4
80°-90°	57.4	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°	539.2	22.0
0°-40°	947.2	38.7
0°-60°	1839.5	75.1
0°-90°	2449.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2449.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	308	331	375	423	437	28
15°	231	424	719	869	899	64
25°	148	481	849	893	894	68
35°	100	452	803	852	885	62
45°	68	354	717	815	853	53
55°	49	237	605	700	722	45
65°	39	155	446	504	512	38
75°	28	97	246	268	272	30
85°	10	26	60	67	68	12
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5
2.5°	316.5	316.5	318.1	320.6	321.4	324.6	329.5	332.0	333.6	332.0
5°	308.4	312.4	325.7	345.0	364.3	385.7	413.2	426.4	434.6	436.6
7.5°	292.3	303.5	341.1	391.6	447.8	503.6	551.8	590.9	613.7	614.7
10°	276.8	296.1	354.2	431.5	508.8	588.2	654.4	695.1	727.6	736.8
12.5°	259.7	288.8	368.0	471.4	577.2	666.4	739.9	784.6	810.7	814.2
15°	231.0	273.8	387.7	534.3	665.6	772.4	842.6	878.3	894.5	898.6
17.5°	204.4	260.3	405.0	583.5	739.0	835.3	888.6	911.0	919.2	919.6
20°	183.2	247.3	413.2	617.7	776.5	863.0	901.7	915.9	920.0	918.0
22.5°	167.7	233.5	418.1	640.5	799.3	873.6	902.5	909.4	911.0	909.0
25°	147.6	210.7	418.3	670.7	822.3	876.2	891.5	893.5	895.6	894.5
27.5°	129.7	185.2	412.2	690.6	825.5	863.8	870.9	876.0	882.3	883.8
30°	119.1	168.9	404.0	697.1	822.3	850.8	857.9	867.1	878.3	881.3
32.5°	110.9	153.5	391.8	697.9	814.2	835.3	844.9	862.2	878.3	882.9
35°	99.7	130.3	371.5	692.0	795.8	810.1	830.4	858.9	880.3	885.4
37.5°	88.7	113.6	343.8	680.0	771.8	786.7	820.3	854.7	878.5	884.8
40°	81.4	103.8	322.6	668.6	753.1	770.4	812.1	849.8	875.2	882.3
42.5°	75.7	95.7	299.8	654.0	731.9	755.7	802.3	842.4	866.3	871.8
45°	68.2	83.5	263.6	626.9	699.2	734.8	785.7	824.3	846.7	852.8
47.5°	61.1	74.9	225.7	596.0	665.8	709.3	761.4	798.1	818.6	822.7
50°	57.0	69.2	200.5	574.0	642.2	689.0	741.9	778.5	795.8	799.9
52.5°	53.7	64.3	176.9	548.7	617.7	667.8	718.3	751.7	767.3	769.0
55°	48.8	58.0	145.5	509.9	579.1	631.0	679.8	706.3	717.5	721.5
57.5°	46.2	53.3	120.9	467.7	535.5	587.6	632.0	652.5	661.5	662.9
60°	43.8	50.9	107.9	437.6	507.8	556.7	595.3	612.6	620.8	623.8
62.5°	41.3	49.3	98.1	406.7	475.3	522.5	556.3	571.1	577.6	578.3
65°	38.7	46.8	86.5	359.2	424.4	468.1	494.6	506.8	509.9	511.9
67.5°	36.0	44.4	78.2	311.4	371.9	408.1	427.6	438.2	438.8	443.1
70°	33.6	42.7	73.3	278.8	332.8	367.4	383.7	391.8	390.8	391.8
72.5°	32.0	40.3	70.0	245.5	295.3	322.6	337.3	343.0	343.6	343.8
75°	28.5	35.6	65.1	194.4	234.1	257.5	268.7	267.7	270.7	271.7
77.5°	24.6	30.7	53.5	143.3	175.4	190.9	199.9	202.7	201.7	201.9
80°	21.4	27.5	43.8	109.9	136.4	148.6	156.7	158.8	157.7	158.8
82.5°	17.3	22.6	34.0	81.4	102.2	111.9	117.6	118.1	118.7	120.5
85°	10.2	13.2	20.4	44.8	57.0	62.1	66.1	67.2	68.2	68.2
87.5°	4.1	5.7	10.6	18.7	23.6	25.2	25.2	23.6	25.2	22.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)