

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-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-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

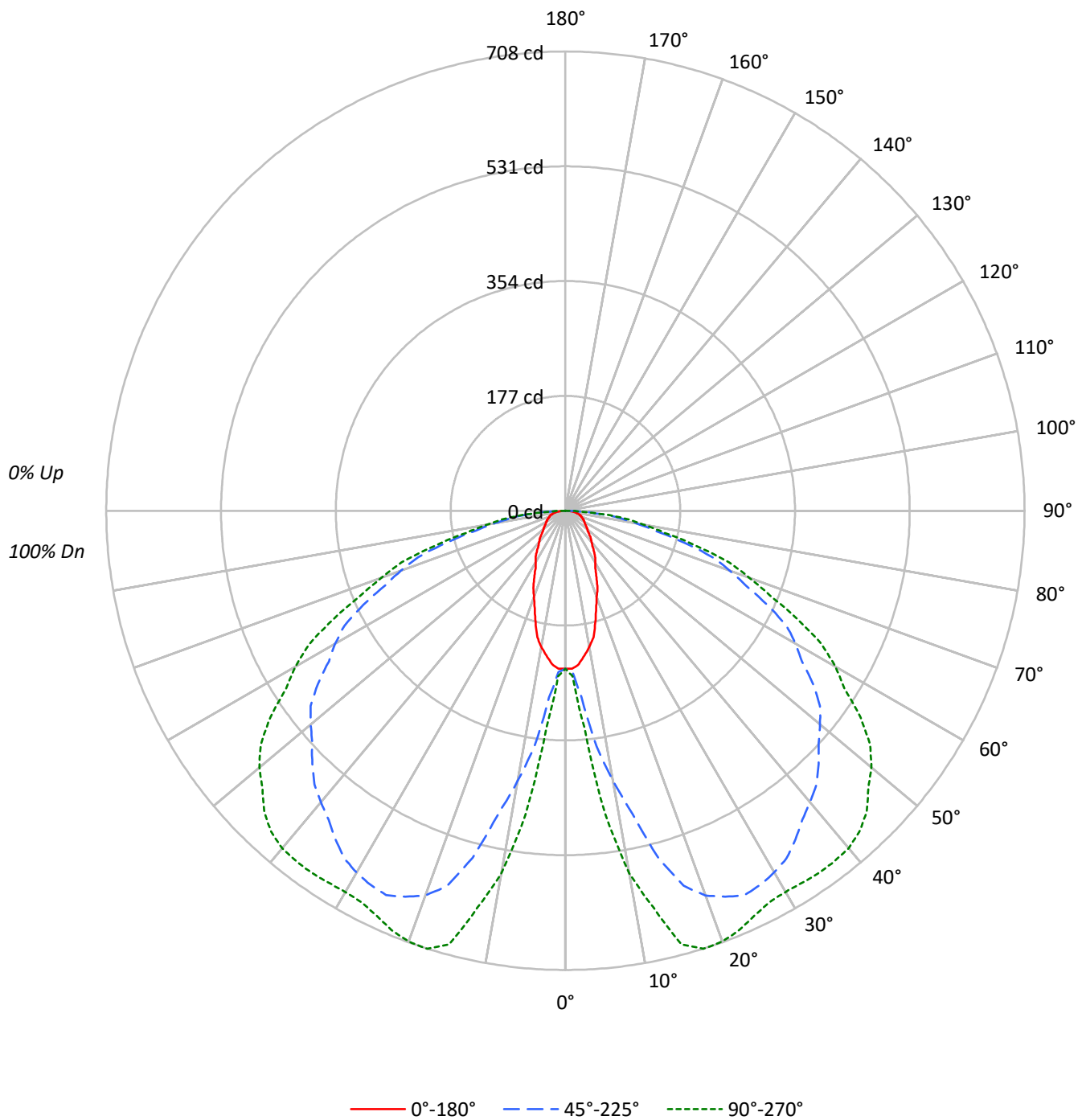
Lumens per Lamp: N/A
Luminaire Lumens: 1886.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-927-1D-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
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	2076
10°	1331	2638	3543
15°	1133	3526	4406
20°	924	4132	4626
25°	771	4438	4675
30°	651	4575	4820
35°	577	4643	5119
40°	503	4710	5455
45°	457	4802	5712
50°	420	4904	5894
55°	403	4996	5958
60°	415	5041	5910
65°	434	5001	5737
70°	466	4848	5426
75°	520	4498	4972
80°	584	3886	4328
85°	550	3236	3705

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 5982 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.0	1.7
10°-20°	139.2	7.4
20°-30°	244.0	12.9
30°-40°	314.2	16.7
40°-50°	350.8	18.6
50°-60°	336.4	17.8
60°-70°	267.7	14.2
70°-80°	157.7	8.4
80°-90°	44.2	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°	415.2	22.0
0°-40°	729.3	38.7
0°-60°	1416.5	75.1
0°-90°	1886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1886.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	244	244	244	244	244	
5°	237	254	289	326	336	22
15°	178	327	554	669	692	49
25°	114	371	654	688	689	52
35°	77	348	618	656	682	48
45°	52	273	552	627	657	41
55°	38	182	466	539	556	34
65°	30	119	344	388	394	30
75°	22	75	189	206	209	23
85°	8	20	46	52	52	9
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7
2.5°	243.7	243.7	245.0	246.8	247.5	250.0	253.7	255.6	256.9	255.6
5°	237.4	240.6	250.8	265.6	280.5	297.0	318.1	328.3	334.6	336.2
7.5°	225.1	233.7	262.7	301.5	344.8	387.7	424.9	455.0	472.5	473.3
10°	213.1	228.0	272.7	332.3	391.8	452.9	503.9	535.2	560.3	567.3
12.5°	200.0	222.4	283.4	363.0	444.5	513.1	569.7	604.2	624.2	626.9
15°	177.9	210.8	298.6	411.4	512.5	594.8	648.8	676.3	688.8	691.9
17.5°	157.4	200.4	311.9	449.3	569.1	643.2	684.3	701.5	707.8	708.1
20°	141.1	190.4	318.1	475.7	597.9	664.5	694.3	705.3	708.4	706.8
22.5°	129.1	179.8	321.9	493.2	615.5	672.7	694.9	700.2	701.5	699.9
25°	113.6	162.2	322.1	516.4	633.2	674.7	686.5	688.0	689.6	688.8
27.5°	99.8	142.6	317.4	531.8	635.7	665.1	670.6	674.5	679.4	680.5
30°	91.7	130.1	311.1	536.8	633.2	655.1	660.6	667.6	676.3	678.6
32.5°	85.4	118.2	301.7	537.4	626.9	643.2	650.6	663.9	676.3	679.9
35°	76.8	100.3	286.0	532.9	612.8	623.8	639.4	661.4	677.8	681.7
37.5°	68.3	87.5	264.7	523.6	594.3	605.7	631.6	658.1	676.4	681.3
40°	62.7	79.9	248.4	514.8	579.9	593.2	625.3	654.3	673.9	679.4
42.5°	58.3	73.7	230.9	503.6	563.6	581.9	617.8	648.7	667.0	671.2
45°	52.5	64.3	203.0	482.7	538.3	565.8	605.0	634.7	652.0	656.7
47.5°	47.0	57.7	173.8	458.9	512.6	546.2	586.3	614.5	630.3	633.5
50°	43.9	53.3	154.4	442.0	494.5	530.5	571.3	599.5	612.8	615.9
52.5°	41.4	49.5	136.2	422.5	475.7	514.2	553.1	578.8	590.8	592.1
55°	37.6	44.7	112.1	392.6	445.9	485.8	523.5	543.8	552.5	555.6
57.5°	35.6	41.1	93.1	360.2	412.3	452.5	486.6	502.5	509.4	510.4
60°	33.7	39.2	83.1	337.0	391.0	428.6	458.4	471.7	478.0	480.4
62.5°	31.8	37.9	75.5	313.1	366.0	402.3	428.3	439.8	444.8	445.3
65°	29.8	36.0	66.6	276.6	326.8	360.5	380.8	390.2	392.6	394.2
67.5°	27.7	34.2	60.2	239.8	286.3	314.2	329.3	337.4	337.9	341.2
70°	25.9	32.9	56.4	214.7	256.2	282.9	295.4	301.7	300.9	301.7
72.5°	24.6	31.0	53.9	189.0	227.4	248.4	259.7	264.1	264.5	264.7
75°	21.9	27.4	50.2	149.7	180.2	198.3	206.9	206.1	208.4	209.2
77.5°	19.0	23.7	41.2	110.3	135.1	147.0	153.9	156.1	155.3	155.5
80°	16.5	21.2	33.7	84.6	105.0	114.4	120.7	122.2	121.5	122.2
82.5°	13.3	17.4	26.2	62.7	78.7	86.2	90.6	90.9	91.4	92.8
85°	7.8	10.2	15.7	34.5	43.9	47.8	50.9	51.7	52.5	52.5
87.5°	3.1	4.4	8.1	14.4	18.2	19.4	19.4	18.2	19.4	17.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)