

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-940-1D-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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

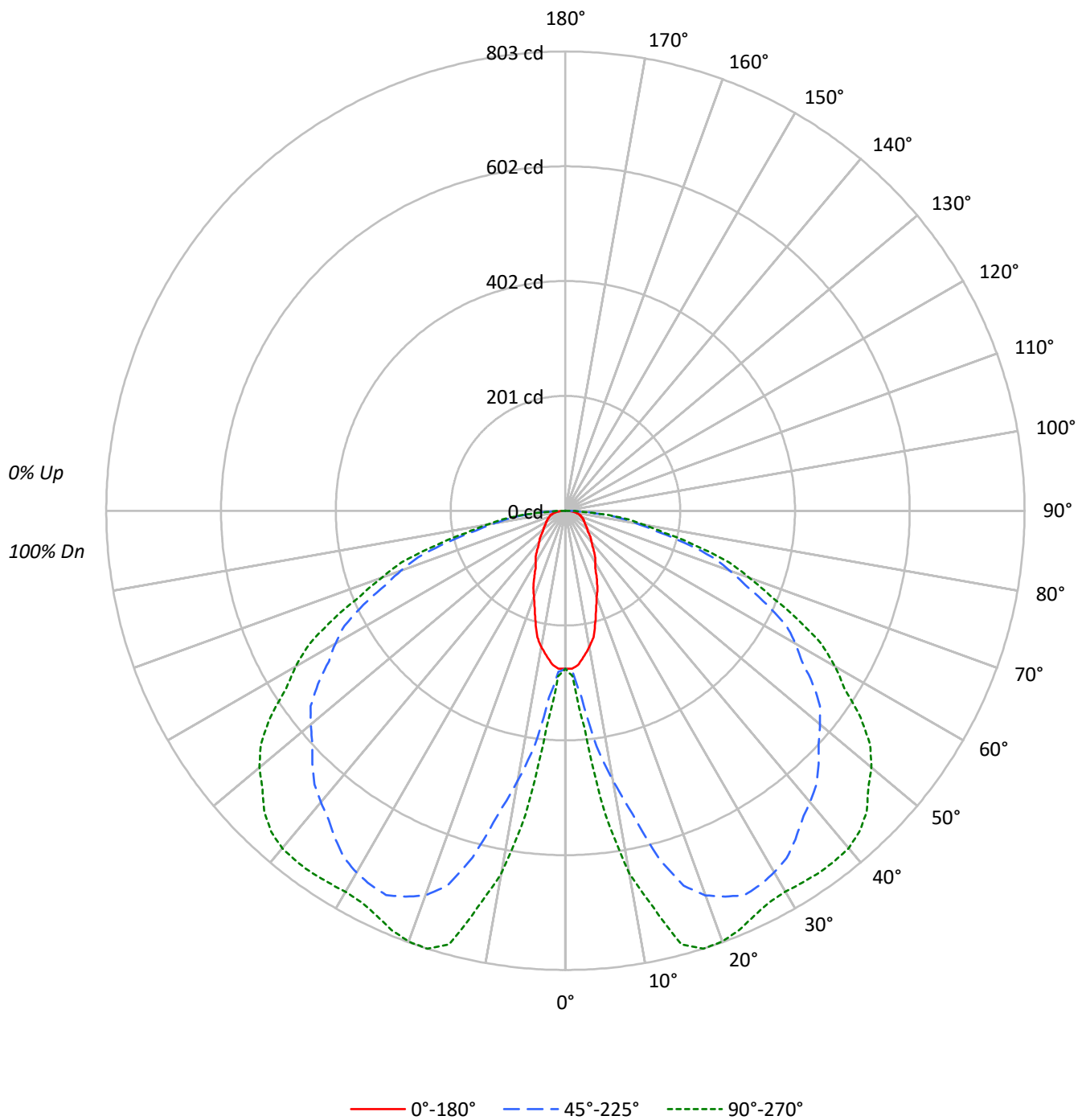
Lumens per Lamp: N/A
Luminaire Lumens: 2138.7 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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

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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°	1700	1700	1700
5°	1663	2022	2354
10°	1510	2991	4018
15°	1284	3998	4997
20°	1047	4685	5246
25°	875	5033	5301
30°	739	5188	5465
35°	654	5264	5805
40°	571	5341	6186
45°	518	5446	6478
50°	477	5561	6684
55°	458	5665	6756
60°	470	5717	6701
65°	492	5672	6506
70°	527	5498	6152
75°	592	5100	5639
80°	662	4406	4909
85°	628	3670	4199

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 6784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	1.7
10°-20°	157.9	7.4
20°-30°	276.7	12.9
30°-40°	356.3	16.7
40°-50°	397.8	18.6
50°-60°	381.4	17.8
60°-70°	303.5	14.2
70°-80°	178.8	8.4
80°-90°	50.1	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°	470.8	22.0
0°-40°	827.1	38.7
0°-60°	1606.2	75.1
0°-90°	2138.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2138.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	276	276	276	276	276	
5°	269	289	327	369	381	25
15°	202	371	628	759	785	56
25°	129	420	742	780	781	59
35°	87	394	701	744	773	54
45°	60	310	626	711	745	46
55°	43	207	528	611	630	39
65°	34	135	390	440	447	33
75°	25	85	215	234	237	26
85°	9	23	52	58	60	10
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4
2.5°	276.4	276.4	277.8	279.9	280.6	283.5	287.7	289.9	291.3	289.9
5°	269.3	272.8	284.4	301.2	318.1	336.8	360.8	372.3	379.4	381.2
7.5°	255.2	265.0	297.9	341.9	391.0	439.7	481.8	515.9	535.8	536.7
10°	241.7	258.6	309.2	376.8	444.3	513.6	571.4	606.9	635.4	643.4
12.5°	226.8	252.2	321.3	411.6	504.0	581.9	646.0	685.1	707.9	710.9
15°	201.7	239.0	338.6	466.5	581.2	674.5	735.8	766.9	781.1	784.7
17.5°	178.4	227.3	353.7	509.5	645.3	729.4	775.9	795.5	802.6	803.0
20°	160.0	215.9	360.8	539.4	678.0	753.6	787.3	799.8	803.3	801.5
22.5°	146.4	203.9	365.0	559.3	697.9	762.8	788.0	794.1	795.5	793.7
25°	128.9	183.9	365.2	585.6	718.0	765.1	778.4	780.2	782.0	781.1
27.5°	113.2	161.7	359.9	603.0	720.9	754.3	760.5	764.9	770.4	771.7
30°	104.0	147.5	352.8	608.7	718.0	742.9	749.1	757.1	766.9	769.5
32.5°	96.9	134.0	342.1	609.4	710.9	729.4	737.7	752.8	766.9	771.0
35°	87.1	113.7	324.3	604.3	694.9	707.3	725.1	750.0	768.7	773.1
37.5°	77.5	99.2	300.2	593.8	673.9	686.9	716.2	746.3	767.1	772.6
40°	71.1	90.6	281.7	583.8	657.6	672.7	709.1	742.0	764.2	770.4
42.5°	66.1	83.5	261.8	571.0	639.1	659.9	700.6	735.6	756.4	761.2
45°	59.5	72.9	230.2	547.4	610.5	641.6	686.0	719.8	739.3	744.7
47.5°	53.3	65.4	197.1	520.4	581.3	619.4	664.9	696.9	714.8	718.4
50°	49.8	60.4	175.1	501.2	560.7	601.6	647.8	679.8	694.9	698.5
52.5°	46.9	56.2	154.4	479.1	539.4	583.1	627.2	656.3	670.0	671.4
55°	42.7	50.7	127.1	445.2	505.6	550.9	593.6	616.7	626.5	630.0
57.5°	40.3	46.6	105.6	408.4	467.6	513.1	551.8	569.8	577.6	578.9
60°	38.2	44.4	94.2	382.1	443.4	486.1	519.8	535.0	542.1	544.7
62.5°	36.1	43.0	85.7	355.1	415.0	456.2	485.7	498.7	504.4	504.9
65°	33.8	40.9	75.5	313.7	370.6	408.8	431.9	442.5	445.2	447.0
67.5°	31.5	38.7	68.2	271.9	324.7	356.3	373.4	382.6	383.2	386.9
70°	29.3	37.3	64.0	243.5	290.6	320.8	335.0	342.1	341.2	342.1
72.5°	27.9	35.2	61.1	214.3	257.9	281.7	294.5	299.5	300.0	300.2
75°	24.9	31.1	56.9	169.7	204.4	224.8	234.6	233.7	236.4	237.3
77.5°	21.5	26.8	46.7	125.1	153.2	166.7	174.5	177.0	176.1	176.3
80°	18.7	24.0	38.2	96.0	119.1	129.7	136.8	138.6	137.7	138.6
82.5°	15.1	19.7	29.7	71.1	89.2	97.7	102.7	103.1	103.6	105.2
85°	8.9	11.6	17.8	39.1	49.8	54.2	57.8	58.6	59.5	59.5
87.5°	3.6	5.0	9.2	16.4	20.6	22.0	22.0	20.6	22.0	19.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)