

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-100D-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-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

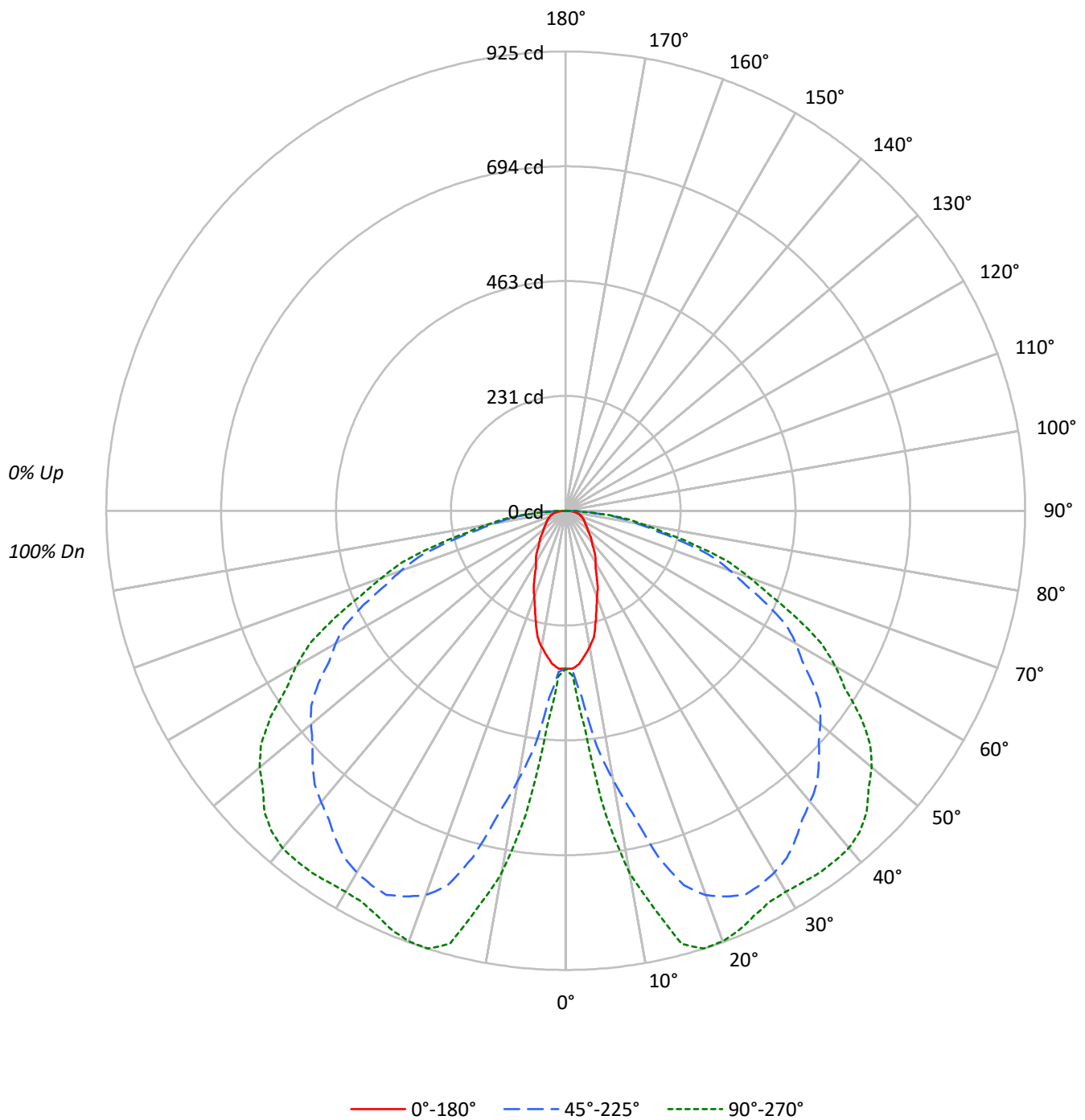
Lumens per Lamp: N/A
Luminaire Lumens: 2462.6 lumens
Efficiency: N/A
Efficacy: 75.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2936	2936	2936
5°	2871	3492	4065
10°	2607	5167	6940
15°	2219	6905	8630
20°	1809	8092	9061
25°	1511	8692	9156
30°	1275	8960	9440
35°	1130	9093	10026
40°	986	9224	10684
45°	895	9405	11187
50°	822	9605	11543
55°	790	9785	11668
60°	812	9875	11573
65°	849	9796	11236
70°	912	9495	10626
75°	1020	8808	9739
80°	1142	7611	8480
85°	1080	6336	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 11717 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	1.7
10°-20°	181.8	7.4
20°-30°	318.6	12.9
30°-40°	410.2	16.7
40°-50°	458.0	18.6
50°-60°	439.2	17.8
60°-70°	349.5	14.2
70°-80°	205.9	8.4
80°-90°	57.7	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°	542.1	22.0
0°-40°	952.3	38.7
0°-60°	1849.5	75.1
0°-90°	2462.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2462.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	318	318	318	318	318	
5°	310	332	377	425	439	28
15°	232	427	723	874	904	64
25°	148	484	854	898	899	68
35°	100	454	807	856	890	63
45°	69	356	721	819	857	53
55°	49	238	608	703	725	45
65°	39	156	449	506	515	39
75°	29	98	247	269	273	30
85°	10	27	60	67	69	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2	318.2
2.5°	318.2	318.2	319.8	322.3	323.1	326.4	331.3	333.8	335.4	333.8
5°	310.0	314.1	327.4	346.9	366.3	387.8	415.4	428.7	436.9	438.9
7.5°	293.9	305.1	343.0	393.7	450.2	506.3	554.8	594.1	617.0	618.0
10°	278.3	297.7	356.1	433.8	511.6	591.4	657.9	698.8	731.6	740.8
12.5°	261.1	290.4	370.0	473.9	580.4	670.0	743.9	788.9	815.1	818.5
15°	232.3	275.2	389.8	537.2	669.2	776.6	847.2	883.0	899.4	903.5
17.5°	205.5	261.7	407.2	586.7	743.0	839.8	893.4	916.0	924.1	924.6
20°	184.2	248.6	415.4	621.1	780.7	867.7	906.5	920.9	925.0	922.9
22.5°	168.6	234.7	420.3	644.0	803.6	878.3	907.4	914.3	916.0	913.9
25°	148.4	211.8	420.5	674.3	826.7	881.0	896.3	898.4	900.4	899.4
27.5°	130.4	186.2	414.4	694.3	830.0	868.5	875.6	880.8	887.1	888.5
30°	119.7	169.8	406.2	700.9	826.7	855.4	862.5	871.8	883.0	886.1
32.5°	111.5	154.3	393.9	701.7	818.5	839.8	849.4	866.8	883.0	887.7
35°	100.3	131.0	373.5	695.8	800.1	814.5	834.9	863.6	885.1	890.2
37.5°	89.2	114.2	345.6	683.7	776.0	790.9	824.7	859.3	883.2	889.6
40°	81.9	104.4	324.4	672.2	757.2	774.6	816.5	854.4	879.9	887.1
42.5°	76.1	96.2	301.4	657.5	735.9	759.8	806.7	847.0	870.9	876.5
45°	68.6	83.9	265.0	630.3	702.9	738.7	789.9	828.8	851.3	857.4
47.5°	61.4	75.3	226.9	599.2	669.4	713.2	765.5	802.4	823.1	827.1
50°	57.3	69.6	201.6	577.1	645.6	692.7	745.9	782.7	800.1	804.2
52.5°	54.0	64.7	177.8	551.7	621.1	671.4	722.2	755.7	771.5	773.1
55°	49.1	58.3	146.3	512.6	582.2	634.4	683.5	710.1	721.3	725.4
57.5°	46.5	53.6	121.6	470.3	538.4	590.8	635.4	656.1	665.1	666.5
60°	44.0	51.2	108.5	440.0	510.6	559.7	598.6	616.0	624.1	627.2
62.5°	41.5	49.5	98.6	408.9	477.8	525.3	559.3	574.2	580.8	581.4
65°	38.9	47.1	87.0	361.2	426.7	470.7	497.3	509.5	512.6	514.7
67.5°	36.2	44.6	78.6	313.1	373.9	410.3	429.9	440.6	441.2	445.5
70°	33.8	43.0	73.7	280.4	334.6	369.4	385.7	393.9	392.9	393.9
72.5°	32.1	40.5	70.4	246.8	296.9	324.4	339.1	344.8	345.4	345.6
75°	28.6	35.8	65.5	195.4	235.3	258.9	270.1	269.1	272.2	273.2
77.5°	24.8	30.9	53.8	144.1	176.4	191.9	201.0	203.8	202.8	203.0
80°	21.5	27.6	44.0	110.5	137.1	149.4	157.6	159.6	158.6	159.6
82.5°	17.4	22.7	34.2	81.9	102.7	112.6	118.3	118.7	119.3	121.1
85°	10.2	13.3	20.5	45.0	57.3	62.4	66.5	67.5	68.6	68.6
87.5°	4.1	5.7	10.6	18.8	23.7	25.4	25.4	23.7	25.4	22.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)