

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-930-1D-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-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

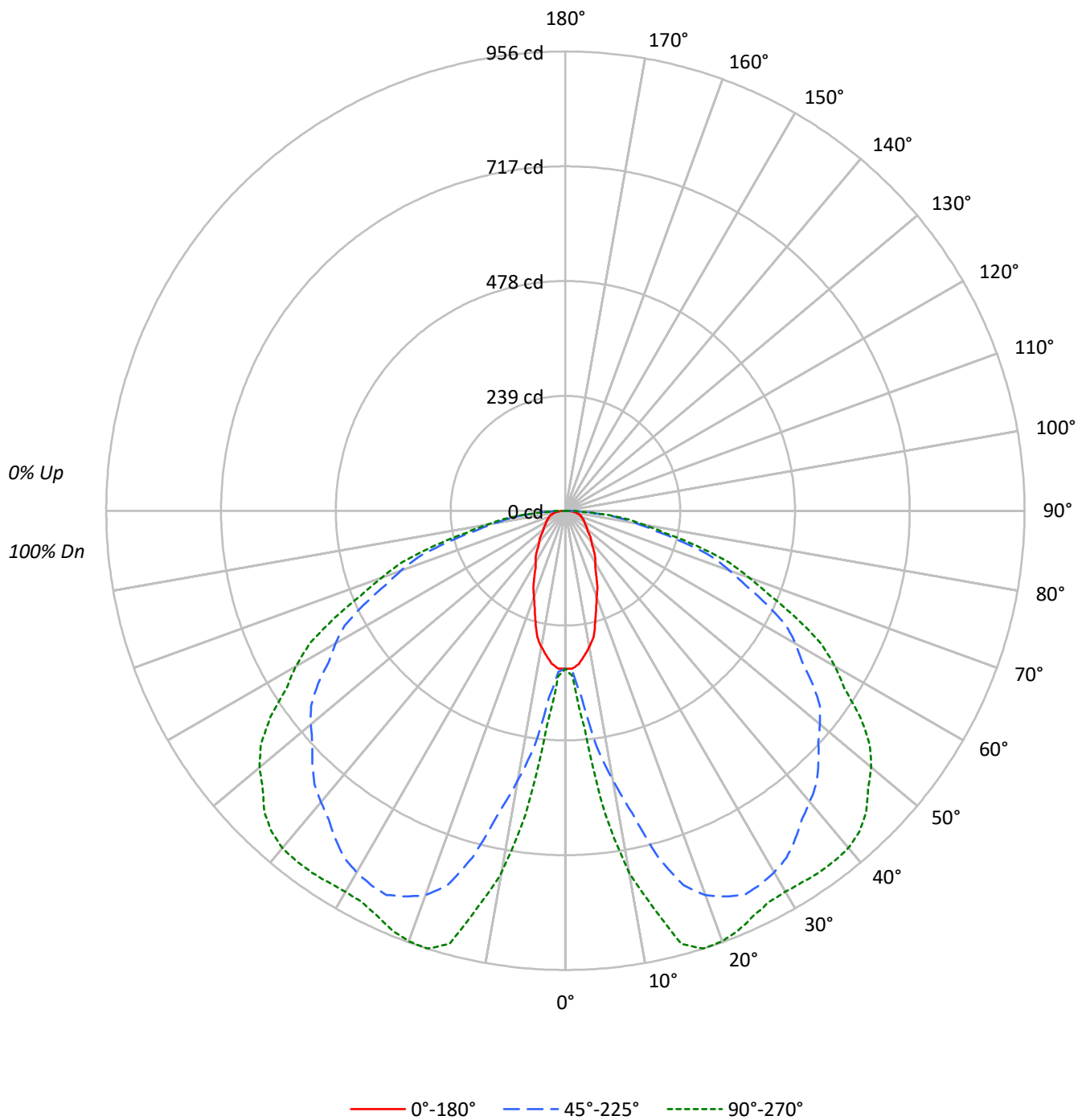
Lumens per Lamp: N/A
Luminaire Lumens: 2545.0 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	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°	3034	3034	3034
5°	2967	3609	4201
10°	2694	5340	7173
15°	2292	7136	8918
20°	1868	8363	9365
25°	1561	8983	9462
30°	1318	9260	9755
35°	1167	9397	10361
40°	1019	9533	11042
45°	924	9720	11562
50°	850	9926	11929
55°	817	10112	12059
60°	840	10204	11961
65°	878	10122	11612
70°	941	9812	10982
75°	1055	9103	10063
80°	1180	7866	8767
85°	1122	6547	7495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 12109 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.1	1.7
10°-20°	187.9	7.4
20°-30°	329.2	12.9
30°-40°	423.9	16.7
40°-50°	473.3	18.6
50°-60°	453.9	17.8
60°-70°	361.2	14.2
70°-80°	212.8	8.4
80°-90°	59.6	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°	560.2	22.0
0°-40°	984.1	38.7
0°-60°	1911.3	75.1
0°-90°	2545.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2545.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	329	329	329	329	329	
5°	320	343	390	440	454	29
15°	240	441	747	903	934	67
25°	153	500	882	928	930	71
35°	104	469	834	885	920	65
45°	71	368	745	846	886	55
55°	51	246	629	727	750	46
65°	40	161	464	523	532	40
75°	30	101	255	278	282	31
85°	11	27	62	70	71	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°	328.9	328.9	328.9	328.9	328.9	328.9	328.9	328.9	328.9	328.9
2.5°	328.9	328.9	330.5	333.1	333.9	337.3	342.4	344.9	346.6	344.9
5°	320.4	324.6	338.4	358.5	378.6	400.8	429.3	443.1	451.5	453.6
7.5°	303.7	315.3	354.4	406.9	465.3	523.2	573.3	613.9	637.6	638.7
10°	287.6	307.7	368.0	448.3	528.7	611.2	679.9	722.2	756.0	765.6
12.5°	269.9	300.1	382.4	489.8	599.8	692.4	768.7	815.3	842.3	845.9
15°	240.0	284.4	402.9	555.1	691.5	802.6	875.5	912.5	929.5	933.7
17.5°	212.3	270.5	420.9	606.3	767.9	867.9	923.3	946.6	955.1	955.5
20°	190.3	257.0	429.3	641.8	806.8	896.7	936.9	951.7	955.9	953.8
22.5°	174.3	242.6	434.4	665.5	830.5	907.7	937.7	944.9	946.6	944.5
25°	153.3	218.9	434.6	696.8	854.4	910.4	926.3	928.4	930.5	929.5
27.5°	134.7	192.4	428.3	717.6	857.8	897.5	904.9	910.2	916.8	918.3
30°	123.7	175.5	419.8	724.3	854.4	884.0	891.4	900.9	912.5	915.7
32.5°	115.3	159.5	407.1	725.2	845.9	867.9	877.9	895.8	912.5	917.4
35°	103.6	135.3	386.0	719.0	826.9	841.7	862.8	892.5	914.7	919.9
37.5°	92.2	118.0	357.2	706.6	801.9	817.4	852.3	888.0	912.8	919.3
40°	84.6	107.9	335.2	694.7	782.5	800.5	843.8	882.9	909.4	916.8
42.5°	78.7	99.4	311.5	679.5	760.5	785.2	833.7	875.3	900.1	905.8
45°	70.8	86.7	273.9	651.4	726.4	763.5	816.3	856.5	879.8	886.1
47.5°	63.4	77.8	234.5	619.2	691.8	737.0	791.2	829.2	850.6	854.8
50°	59.2	71.9	208.3	596.4	667.2	715.9	770.9	808.9	826.9	831.1
52.5°	55.8	66.8	183.8	570.2	641.8	693.9	746.3	781.0	797.3	799.0
55°	50.8	60.3	151.2	529.8	601.7	655.6	706.4	733.8	745.5	749.7
57.5°	48.0	55.4	125.6	486.0	556.4	610.5	656.7	678.0	687.3	688.8
60°	45.5	52.9	112.1	454.7	527.6	578.4	618.6	636.6	645.0	648.2
62.5°	42.9	51.2	101.9	422.5	493.8	542.9	578.0	593.4	600.2	600.8
65°	40.2	48.6	89.9	373.3	440.9	486.4	513.9	526.6	529.8	531.9
67.5°	37.4	46.1	81.2	323.6	386.4	424.0	444.3	455.3	456.0	460.4
70°	34.9	44.4	76.1	289.7	345.8	381.7	398.6	407.1	406.0	407.1
72.5°	33.2	41.9	72.7	255.0	306.9	335.2	350.4	356.3	357.0	357.2
75°	29.6	37.0	67.7	202.0	243.2	267.5	279.2	278.1	281.3	282.3
77.5°	25.6	31.9	55.6	148.9	182.3	198.4	207.7	210.6	209.6	209.8
80°	22.2	28.6	45.5	114.2	141.7	154.4	162.8	165.0	163.9	165.0
82.5°	18.0	23.5	35.3	84.6	106.2	116.3	122.2	122.7	123.3	125.2
85°	10.6	13.7	21.1	46.5	59.2	64.5	68.7	69.8	70.8	70.8
87.5°	4.2	5.9	11.0	19.5	24.5	26.2	26.2	24.5	26.2	23.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)