

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-830-1D-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-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

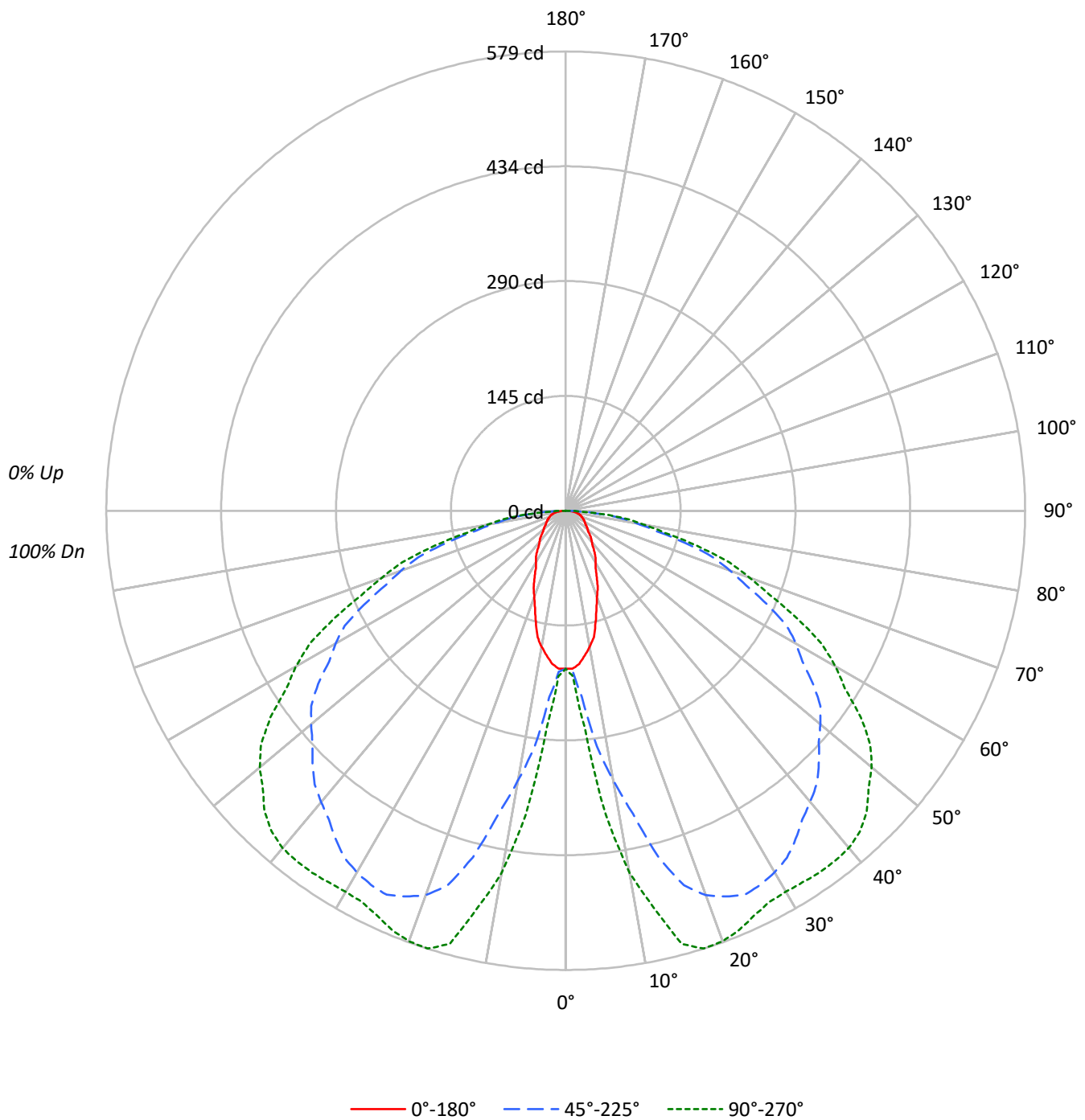
Lumens per Lamp: N/A
Luminaire Lumens: 1541.3 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
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°	1838	1838	1838
5°	1797	2186	2544
10°	1632	3234	4343
15°	1389	4322	5401
20°	1132	5065	5671
25°	946	5440	5730
30°	798	5608	5908
35°	707	5691	6275
40°	617	5773	6687
45°	560	5887	7001
50°	515	6011	7224
55°	494	6124	7303
60°	507	6181	7244
65°	530	6130	7032
70°	569	5943	6652
75°	638	5513	6096
80°	712	4763	5308
85°	677	3970	4541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7334 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.1	1.7
10°-20°	113.8	7.4
20°-30°	199.4	12.9
30°-40°	256.7	16.7
40°-50°	286.6	18.6
50°-60°	274.9	17.8
60°-70°	218.8	14.2
70°-80°	128.9	8.4
80°-90°	36.1	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°	339.3	22.0
0°-40°	596.0	38.7
0°-60°	1157.6	75.1
0°-90°	1541.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1541.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	199	199	199	199	199	
5°	194	208	236	266	275	18
15°	145	267	452	547	566	40
25°	93	303	534	562	563	43
35°	63	284	505	536	557	39
45°	43	223	451	513	537	33
55°	31	149	381	440	454	28
65°	24	97	281	317	322	24
75°	18	61	155	169	171	19
85°	6	17	38	42	43	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2
2.5°	199.2	199.2	200.2	201.7	202.2	204.3	207.4	208.9	209.9	208.9
5°	194.0	196.6	204.9	217.1	229.3	242.7	260.0	268.3	273.4	274.7
7.5°	183.9	191.0	214.7	246.4	281.8	316.9	347.2	371.8	386.2	386.8
10°	174.2	186.4	222.9	271.5	320.2	370.1	411.8	437.4	457.9	463.6
12.5°	163.4	181.7	231.6	296.6	363.2	419.3	465.6	493.7	510.1	512.3
15°	145.4	172.3	244.0	336.2	418.8	486.1	530.2	552.7	562.9	565.5
17.5°	128.6	163.8	254.9	367.2	465.1	525.6	559.2	573.3	578.4	578.7
20°	115.3	155.6	260.0	388.7	488.6	543.1	567.4	576.4	578.9	577.6
22.5°	105.5	146.9	263.1	403.1	503.0	549.7	567.9	572.3	573.3	572.0
25°	92.9	132.6	263.2	422.0	517.4	551.4	561.0	562.3	563.5	562.9
27.5°	81.6	116.6	259.4	434.6	519.5	543.6	548.0	551.3	555.2	556.1
30°	74.9	106.3	254.2	438.7	517.4	535.4	539.9	545.6	552.7	554.6
32.5°	69.8	96.6	246.6	439.2	512.3	525.6	531.7	542.5	552.7	555.6
35°	62.8	82.0	233.7	435.5	500.8	509.8	522.6	540.5	553.9	557.1
37.5°	55.8	71.5	216.3	427.9	485.7	495.0	516.2	537.8	552.8	556.8
40°	51.2	65.3	203.0	420.7	473.9	484.8	511.0	534.7	550.7	555.2
42.5°	47.6	60.2	188.7	411.5	460.6	475.6	504.9	530.1	545.1	548.6
45°	42.9	52.5	165.9	394.5	439.9	462.4	494.4	518.7	532.8	536.6
47.5°	38.4	47.1	142.0	375.0	418.9	446.4	479.1	502.2	515.1	517.7
50°	35.9	43.5	126.2	361.2	404.1	433.5	466.8	489.9	500.8	503.3
52.5°	33.8	40.5	111.3	345.3	388.7	420.2	452.0	473.0	482.9	483.9
55°	30.7	36.5	91.6	320.8	364.4	397.0	427.8	444.4	451.5	454.0
57.5°	29.1	33.6	76.1	294.3	337.0	369.8	397.7	410.6	416.3	417.2
60°	27.5	32.0	67.9	275.4	319.6	350.3	374.6	385.5	390.6	392.6
62.5°	26.0	31.0	61.7	255.9	299.1	328.8	350.0	359.4	363.5	363.9
65°	24.3	29.5	54.4	226.1	267.0	294.6	311.2	318.9	320.8	322.1
67.5°	22.7	27.9	49.2	196.0	234.0	256.8	269.1	275.8	276.1	278.8
70°	21.1	26.9	46.1	175.5	209.4	231.2	241.4	246.6	245.9	246.6
72.5°	20.1	25.4	44.1	154.5	185.8	203.0	212.2	215.8	216.2	216.3
75°	17.9	22.4	41.0	122.3	147.3	162.0	169.1	168.4	170.3	171.0
77.5°	15.5	19.3	33.7	90.2	110.4	120.1	125.8	127.6	126.9	127.1
80°	13.4	17.3	27.5	69.2	85.8	93.5	98.6	99.9	99.3	99.9
82.5°	10.9	14.2	21.4	51.2	64.3	70.4	74.0	74.3	74.7	75.8
85°	6.4	8.3	12.8	28.2	35.9	39.1	41.6	42.3	42.9	42.9
87.5°	2.6	3.6	6.7	11.8	14.9	15.9	15.9	14.9	15.9	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)