

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-840-1D-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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

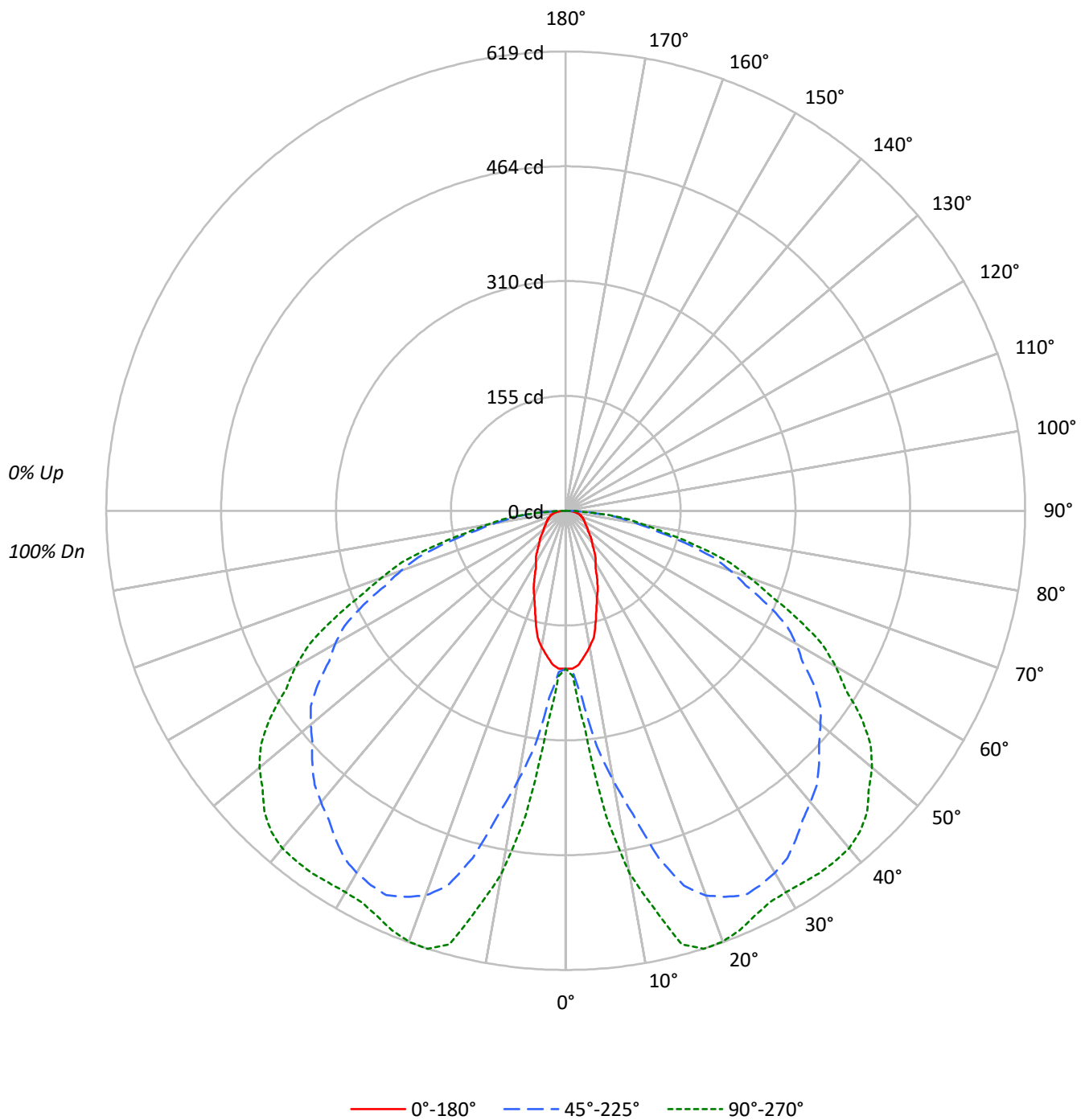
Lumens per Lamp: N/A
Luminaire Lumens: 1649.4 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	0
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°	1966	1966	1966
5°	1923	2339	2723
10°	1746	3460	4648
15°	1486	4624	5780
20°	1212	5420	6069
25°	1012	5821	6132
30°	854	6001	6323
35°	757	6090	6715
40°	660	6178	7155
45°	599	6299	7493
50°	551	6432	7731
55°	529	6553	7816
60°	544	6614	7752
65°	568	6560	7525
70°	610	6360	7116
75°	684	5900	6523
80°	765	5098	5680
85°	730	4245	4859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7848 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.0	1.7
10°-20°	121.8	7.4
20°-30°	213.4	12.9
30°-40°	274.7	16.7
40°-50°	306.7	18.6
50°-60°	294.2	17.8
60°-70°	234.1	14.2
70°-80°	137.9	8.4
80°-90°	38.7	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°	363.1	22.0
0°-40°	637.8	38.7
0°-60°	1238.7	75.1
0°-90°	1649.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1649.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	208	223	252	285	294	19
15°	156	286	484	585	605	43
25°	99	324	572	601	602	46
35°	67	304	541	574	596	42
45°	46	239	483	549	574	36
55°	33	159	407	471	486	30
65°	26	104	300	339	345	26
75°	19	66	166	180	183	20
85°	7	18	40	45	46	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	213.1	213.1	213.1	213.1	213.1	213.1	213.1	213.1	213.1	213.1
2.5°	213.1	213.1	214.2	215.9	216.4	218.6	221.9	223.5	224.6	223.5
5°	207.6	210.4	219.3	232.3	245.3	259.7	278.2	287.1	292.6	294.0
7.5°	196.8	204.4	229.7	263.7	301.5	339.1	371.6	397.9	413.2	413.9
10°	186.4	199.4	238.5	290.6	342.6	396.1	440.6	468.1	490.0	496.1
12.5°	174.9	194.5	247.8	317.4	388.7	448.7	498.2	528.4	545.9	548.2
15°	155.6	184.3	261.1	359.8	448.2	520.1	567.4	591.4	602.4	605.1
17.5°	137.6	175.3	272.7	392.9	497.7	562.5	598.4	613.5	619.0	619.2
20°	123.4	166.5	278.2	416.0	522.9	581.1	607.2	616.8	619.5	618.1
22.5°	112.9	157.2	281.5	431.3	538.2	588.3	607.7	612.4	613.5	612.1
25°	99.4	141.9	281.7	451.6	553.7	590.0	600.3	601.7	603.1	602.4
27.5°	87.3	124.7	277.5	465.0	555.9	581.7	586.5	589.9	594.1	595.1
30°	80.2	113.8	272.1	469.4	553.7	572.9	577.7	583.9	591.4	593.5
32.5°	74.7	103.3	263.8	470.0	548.2	562.5	568.9	580.6	591.4	594.6
35°	67.2	87.7	250.1	466.0	535.9	545.5	559.2	578.4	592.8	596.2
37.5°	59.8	76.5	231.5	457.9	519.7	529.7	552.3	575.5	591.5	595.8
40°	54.8	69.9	217.2	450.2	507.1	518.8	546.9	572.2	589.3	594.1
42.5°	51.0	64.4	201.9	440.4	492.9	508.9	540.3	567.3	583.3	587.0
45°	45.9	56.2	177.5	422.1	470.8	494.8	529.0	555.1	570.2	574.3
47.5°	41.1	50.4	152.0	401.3	448.3	477.6	512.7	537.4	551.2	554.0
50°	38.4	46.6	135.0	386.5	432.4	463.9	499.6	524.2	535.9	538.6
52.5°	36.2	43.3	119.1	369.5	416.0	449.7	483.7	506.2	516.7	517.8
55°	32.9	39.1	98.0	343.3	389.9	424.9	457.8	475.6	483.1	485.9
57.5°	31.1	35.9	81.4	315.0	360.6	395.7	425.6	439.4	445.4	446.4
60°	29.5	34.3	72.6	294.7	342.0	374.9	400.9	412.5	418.0	420.1
62.5°	27.8	33.2	66.1	273.8	320.0	351.8	374.6	384.6	389.0	389.4
65°	26.0	31.5	58.2	241.9	285.8	315.2	333.0	341.3	343.3	344.7
67.5°	24.3	29.9	52.6	209.7	250.4	274.8	288.0	295.1	295.5	298.4
70°	22.6	28.8	49.3	187.8	224.1	247.4	258.4	263.8	263.2	263.8
72.5°	21.5	27.1	47.1	165.3	198.9	217.2	227.1	230.9	231.4	231.5
75°	19.2	24.0	43.9	130.9	157.6	173.4	180.9	180.2	182.3	183.0
77.5°	16.6	20.7	36.0	96.5	118.1	128.6	134.6	136.5	135.8	136.0
80°	14.4	18.5	29.5	74.0	91.8	100.1	105.5	106.9	106.2	106.9
82.5°	11.6	15.2	22.9	54.8	68.8	75.4	79.2	79.5	79.9	81.1
85°	6.9	8.9	13.7	30.2	38.4	41.8	44.5	45.2	45.9	45.9
87.5°	2.7	3.8	7.1	12.6	15.9	17.0	17.0	15.9	17.0	15.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)