

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-F-050U-050D-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 (G3-1910-536-21, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-050U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

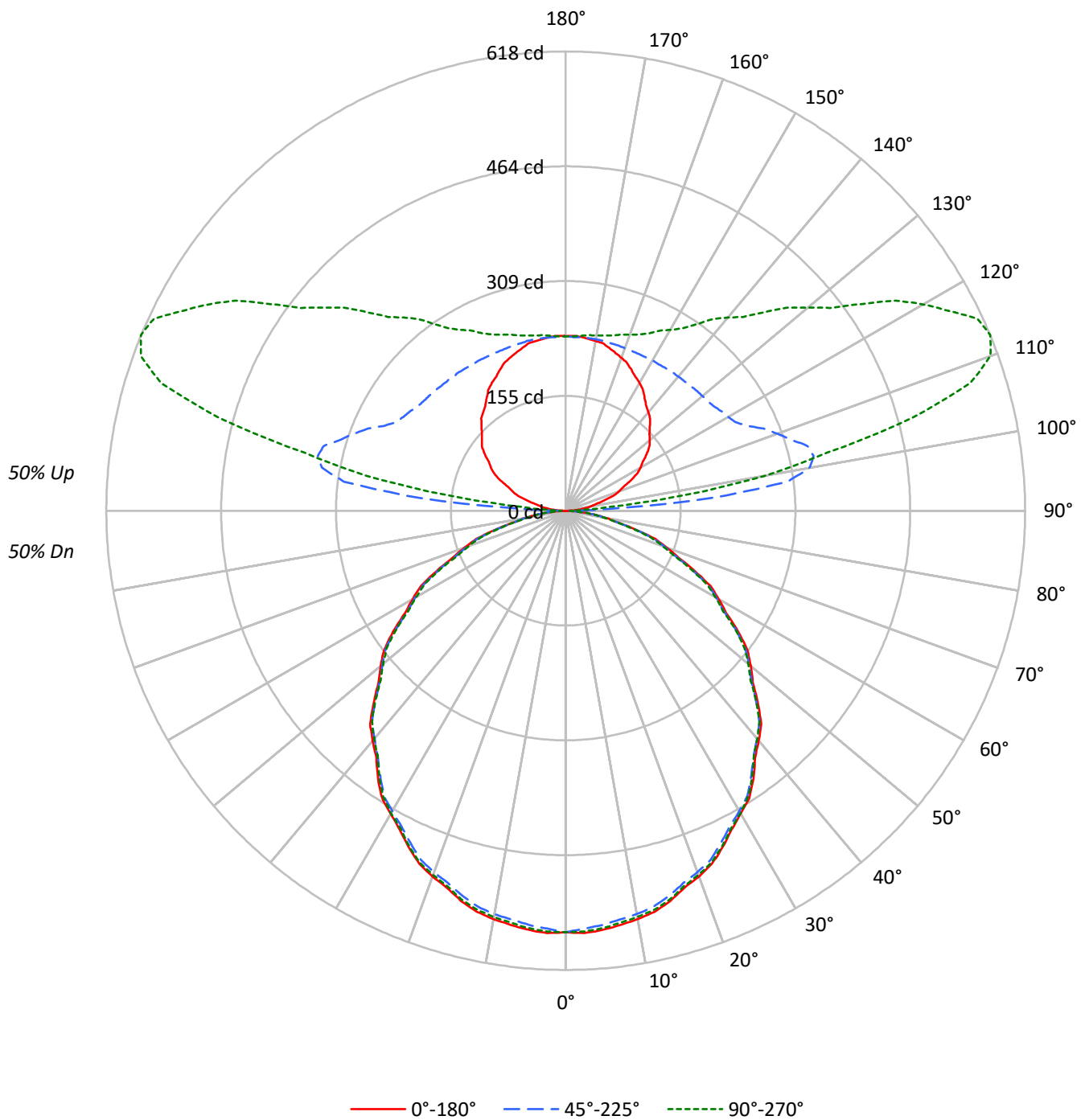
Lumens per Lamp: N/A
Luminaire Lumens: 3082.7 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5233	5233	5233
5°	5246	5183	5224
10°	5229	5164	5200
15°	5192	5127	5171
20°	5144	5084	5121
25°	5086	5024	5071
30°	5015	4975	5007
35°	4960	4901	4925
40°	4865	4819	4828
45°	4765	4726	4726
50°	4665	4620	4599
55°	4555	4494	4470
60°	4386	4316	4286
65°	4176	4093	4045
70°	3893	3809	3728
75°	3490	3383	3301
80°	2821	2784	2704
85°	1683	1927	2011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 4776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	1.7
10°-20°	152.4	4.9
20°-30°	228.9	7.4
30°-40°	273.2	8.9
40°-50°	280.0	9.1
50°-60°	249.7	8.1
60°-70°	186.0	6.0
70°-80°	101.0	3.3
80°-90°	24.3	0.8
90°-100°	112.8	3.7
100°-110°	306.3	9.9
110°-120°	315.0	10.2
120°-130°	251.8	8.2
130°-140°	197.9	6.4
140°-150°	151.7	4.9
150°-160°	109.1	3.5
160°-170°	66.7	2.2
170°-180°	22.5	0.7
0°-30°	434.8	14.1
0°-40°	708.0	23.0
0°-60°	1237.7	40.1
0°-90°	1548.9	50.2
90°-120°	734.1	23.8
90°-150°	1335.5	43.3
90°-180°	1534.0	49.8
0°-180°	3082.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	566	566	560	565	564	54
15°	544	542	537	541	541	153
25°	500	498	494	497	498	230
35°	440	439	435	435	437	275
45°	365	366	362	361	362	282
55°	283	283	279	277	278	252
65°	191	191	188	185	185	189
75°	98	97	95	93	93	104
85°	16	17	18	19	19	22
90°	1	3	5	7	7	2
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	567.2	567.2	567.2	567.2	567.2
2.5°	569.0	567.8	562.9	567.2	566.6
5°	566.4	565.7	559.6	564.9	564.1
7.5°	562.3	560.8	554.9	560.0	559.3
10°	558.1	556.6	551.2	555.8	555.0
12.5°	552.6	551.7	545.8	550.3	550.2
15°	543.6	542.2	536.8	541.4	541.4
17.5°	531.8	530.9	525.7	530.1	529.5
20°	523.9	522.4	517.8	521.6	521.6
22.5°	514.2	513.3	508.7	511.9	512.5
25°	499.6	498.1	493.5	496.6	498.1
27.5°	483.5	482.3	478.5	480.5	481.5
30°	470.7	470.7	467.0	467.8	470.0
32.5°	459.2	459.2	454.8	455.6	456.6
35°	440.4	438.9	435.1	435.1	437.3
37.5°	418.5	417.8	415.3	414.9	415.5
40°	403.9	403.2	400.1	400.9	400.9
42.5°	389.4	388.6	385.6	384.5	385.7
45°	365.2	366.0	362.2	361.4	362.2
47.5°	341.4	341.4	338.3	336.2	337.4
50°	325.0	325.0	321.9	320.4	320.4
52.5°	308.0	308.6	304.9	302.8	303.4
55°	283.2	283.2	279.4	277.2	277.9
57.5°	255.9	255.9	252.1	249.8	251.2
60°	237.7	237.7	233.9	231.6	232.3
62.5°	219.4	219.4	215.6	213.4	213.5
65°	191.3	190.6	187.5	185.3	185.3
67.5°	164.3	162.4	160.1	157.0	157.0
70°	144.3	143.5	141.2	138.2	138.2
72.5°	126.0	124.7	122.4	120.0	120.0
75°	97.9	97.2	94.9	93.4	92.6
77.5°	70.2	69.6	69.4	67.3	67.9
80°	53.1	53.1	52.4	50.9	50.9
82.5°	38.0	38.6	37.2	36.9	36.3
85°	15.9	17.4	18.2	19.0	19.0
87.5°	3.2	5.4	5.3	6.2	6.2
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)