

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-100U-050D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

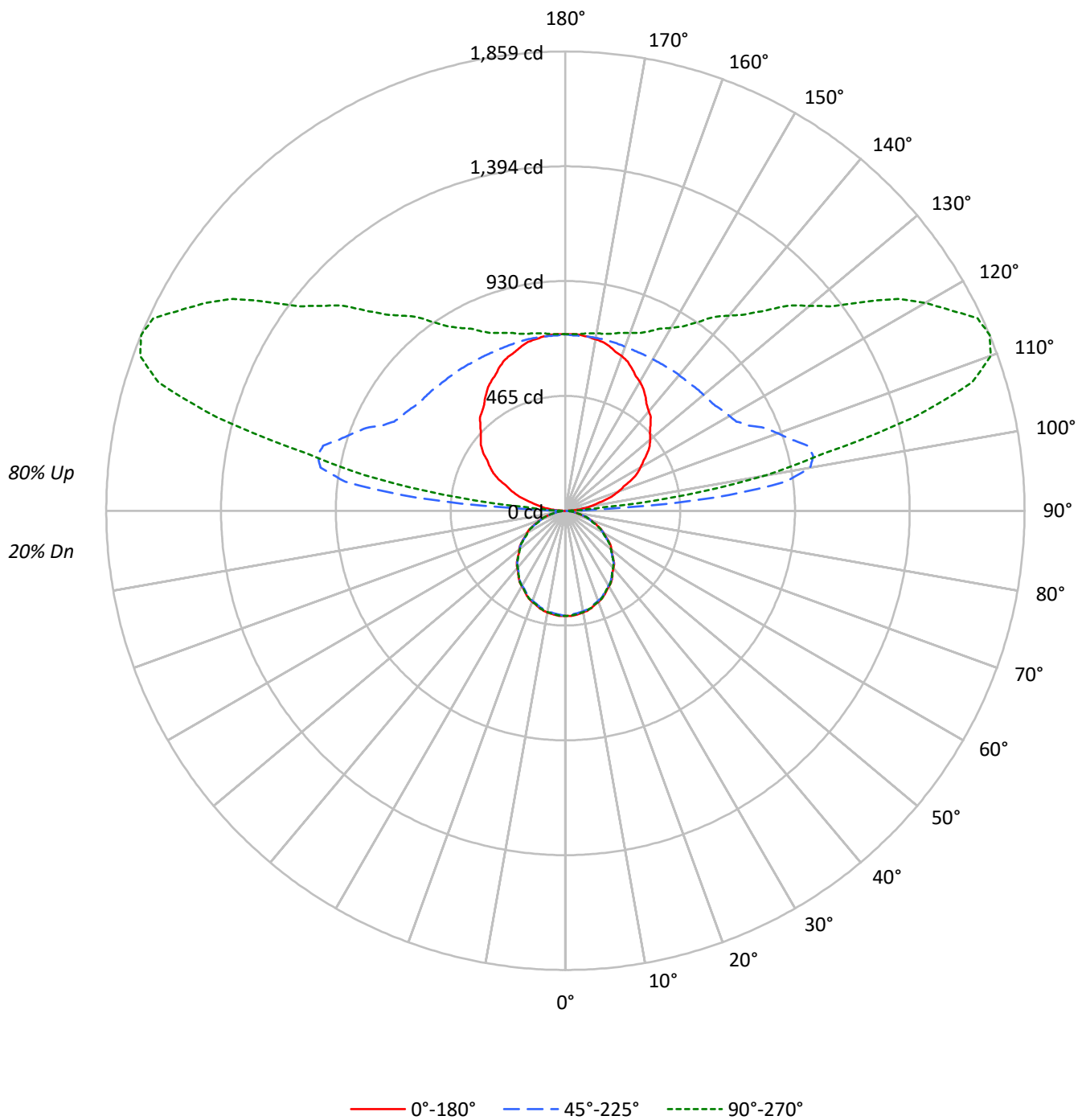
Lumens per Lamp: N/A
Luminaire Lumens: 5801.3 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	25	25	24
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20
3	75	67	60	54	66	59	53	48	45	41	38	32	29	27	20	18	17
4	69	59	51	45	61	52	46	41	40	35	32	28	25	23	17	16	15
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	16	14	13
6	58	46	39	33	51	41	35	30	32	27	24	23	20	17	14	12	11
7	53	42	34	29	47	37	31	26	29	24	21	20	17	15	13	11	10
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	31	24	20	24	19	16	17	14	12	11	9	8
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2617	2617	2617
5°	2623	2591	2612
10°	2614	2582	2600
15°	2596	2564	2585
20°	2572	2542	2561
25°	2543	2512	2535
30°	2508	2487	2504
35°	2480	2450	2463
40°	2432	2410	2414
45°	2383	2363	2363
50°	2332	2310	2299
55°	2278	2248	2235
60°	2192	2158	2144
65°	2089	2048	2022
70°	1946	1904	1863
75°	1747	1692	1652
80°	1413	1392	1353
85°	847	967	1002

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 2388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	0.7
10°-20°	114.3	2.0
20°-30°	171.7	3.0
30°-40°	204.9	3.5
40°-50°	210.0	3.6
50°-60°	187.3	3.2
60°-70°	139.5	2.4
70°-80°	75.7	1.3
80°-90°	19.0	0.3
90°-100°	334.3	5.8
100°-110°	923.0	15.9
110°-120°	951.9	16.4
120°-130°	765.0	13.2
130°-140°	601.2	10.4
140°-150°	461.1	7.9
150°-160°	331.4	5.7
160°-170°	202.6	3.5
170°-180°	68.3	1.2
0°-30°	326.1	5.6
0°-40°	531.0	9.2
0°-60°	928.3	16.0
0°-90°	1162.5	20.0
90°-120°	2209.3	38.1
90°-150°	4036.5	69.6
90°-180°	4639.0	80.0
0°-180°	5801.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	425	424	420	424	423	40
15°	408	407	403	406	406	115
25°	375	374	370	372	374	173
35°	330	329	326	326	328	206
45°	274	274	272	271	272	211
55°	212	212	210	208	208	189
65°	144	143	141	139	139	142
75°	74	73	71	70	70	78
85°	12	13	14	14	14	17
90°	2	4	9	10	11	4
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	425.4	425.4	425.4	425.4	425.4
2.5°	426.7	425.9	422.2	425.4	424.9
5°	424.8	424.3	419.7	423.7	423.1
7.5°	421.7	420.6	416.2	420.0	419.5
10°	418.5	417.4	413.4	416.8	416.3
12.5°	414.4	413.8	409.3	412.7	412.6
15°	407.7	406.6	402.6	406.0	406.0
17.5°	398.8	398.2	394.3	397.6	397.1
20°	392.9	391.8	388.4	391.2	391.2
22.5°	385.6	385.0	381.5	383.9	384.4
25°	374.7	373.6	370.1	372.4	373.6
27.5°	362.6	361.7	358.9	360.4	361.1
30°	353.1	353.1	350.2	350.8	352.5
32.5°	344.4	344.4	341.1	341.7	342.5
35°	330.3	329.2	326.3	326.3	328.0
37.5°	313.9	313.3	311.5	311.2	311.6
40°	302.9	302.4	300.1	300.7	300.7
42.5°	292.0	291.5	289.2	288.4	289.3
45°	273.9	274.5	271.6	271.1	271.6
47.5°	256.0	256.0	253.7	252.2	253.1
50°	243.7	243.7	241.4	240.3	240.3
52.5°	231.0	231.4	228.7	227.1	227.6
55°	212.4	212.4	209.6	207.9	208.4
57.5°	191.9	191.9	189.1	187.4	188.4
60°	178.2	178.2	175.4	173.7	174.3
62.5°	164.6	164.6	161.7	160.0	160.1
65°	143.5	142.9	140.7	138.9	138.9
67.5°	123.2	121.8	120.0	117.8	117.8
70°	108.2	107.6	105.9	103.6	103.6
72.5°	94.5	93.5	91.8	90.0	90.0
75°	73.5	72.9	71.2	70.0	69.5
77.5°	52.6	52.2	52.0	50.5	50.9
80°	39.9	39.9	39.3	38.2	38.2
82.5°	28.5	28.9	27.9	27.7	27.2
85°	12.0	13.1	13.7	14.2	14.2
87.5°	2.7	4.5	5.0	5.7	5.9
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)