

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-PC3-100U-075D-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-100U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

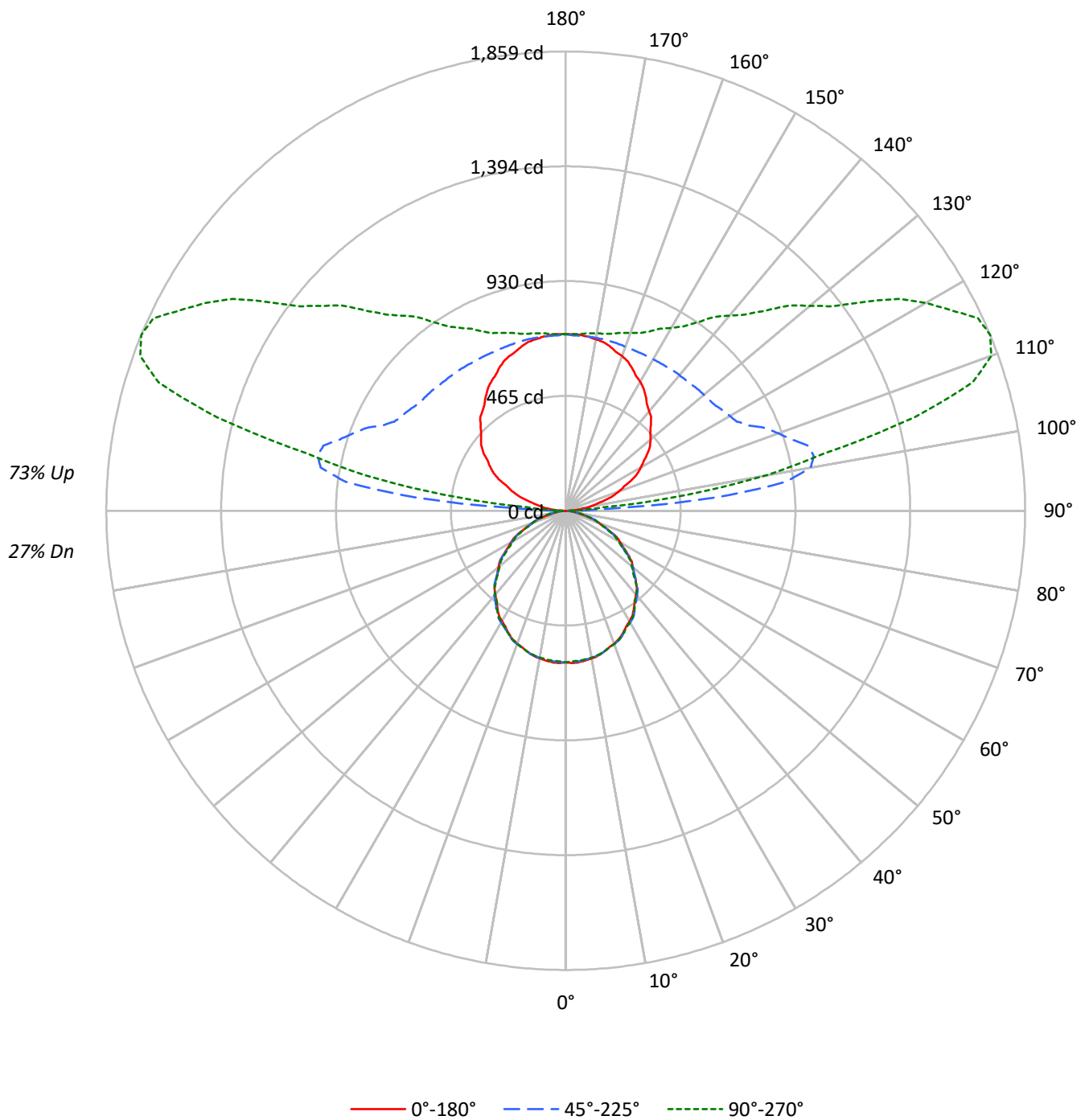
Lumens per Lamp: N/A
Luminaire Lumens: 6315.0 lumens
Efficiency: N/A
Efficacy: 81.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27		
1	93	88	85	81	82	79	76	73	62	59	58	45	44	43	31	30	29	22		
2	84	77	71	66	75	69	64	60	54	50	48	40	38	36	27	26	25	19		
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	24	22	21	16		
4	70	60	52	46	62	54	47	42	42	37	34	31	28	26	21	19	18	14		
5	64	53	45	40	57	48	41	36	37	33	29	28	25	22	19	17	16	12		
6	59	47	40	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10		
7	54	43	35	30	48	38	32	27	30	26	22	23	19	17	16	14	12	9		
8	50	39	31	26	45	35	28	24	28	23	19	21	17	15	14	12	11	8		
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7		
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3774	3774	3774
5°	3803	3778	3764
10°	3794	3776	3766
15°	3774	3774	3770
20°	3749	3760	3760
25°	3714	3740	3729
30°	3668	3712	3697
35°	3614	3669	3643
40°	3554	3604	3567
45°	3489	3514	3459
50°	3398	3398	3343
55°	3290	3247	3199
60°	3132	3068	3020
65°	2895	2837	2812
70°	2534	2554	2545
75°	2039	2255	2270
80°	1449	1913	1930
85°	882	1602	1602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 3514 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	0.9
10°-20°	166.7	2.6
20°-30°	252.4	4.0
30°-40°	302.6	4.8
40°-50°	308.5	4.9
50°-60°	269.3	4.3
60°-70°	192.8	3.1
70°-80°	99.3	1.6
80°-90°	26.6	0.4
90°-100°	334.3	5.3
100°-110°	923.0	14.6
110°-120°	951.9	15.1
120°-130°	765.0	12.1
130°-140°	601.2	9.5
140°-150°	461.1	7.3
150°-160°	331.4	5.2
160°-170°	202.6	3.2
170°-180°	68.3	1.1
0°-30°	477.1	7.6
0°-40°	779.7	12.3
0°-60°	1357.5	21.5
0°-90°	1676.2	26.5
90°-120°	2209.3	35.0
90°-150°	4036.5	63.9
90°-180°	4639.0	73.5
0°-180°	6315.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	616	610	612	610	610	58
15°	593	588	593	593	592	167
25°	547	543	551	549	549	252
35°	481	480	489	485	485	301
45°	401	400	404	399	398	309
55°	307	303	303	298	298	274
65°	199	194	195	193	193	197
75°	86	90	95	96	96	93
85°	12	19	23	23	23	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	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.6	613.6	613.6	613.6	613.6
2.5°	617.3	612.0	613.6	612.2	610.0
5°	615.9	609.8	611.9	610.2	609.7
7.5°	611.5	605.4	608.2	607.0	606.5
10°	607.4	601.3	604.6	603.4	602.9
12.5°	601.9	596.3	600.0	598.9	598.8
15°	592.6	587.6	592.6	592.6	592.1
17.5°	580.9	576.4	581.7	582.0	581.7
20°	572.7	567.7	574.4	573.9	574.4
22.5°	562.7	558.6	565.8	564.3	564.9
25°	547.2	543.3	551.1	549.4	549.4
27.5°	528.8	526.0	534.6	532.7	532.7
30°	516.5	513.7	522.7	520.5	520.5
32.5°	502.9	501.0	509.6	506.8	506.8
35°	481.3	480.1	488.6	485.2	485.2
37.5°	459.0	458.0	465.7	461.6	460.2
40°	442.6	442.1	448.9	444.3	444.3
42.5°	426.3	425.7	431.6	426.1	426.1
45°	401.1	400.0	404.0	398.8	397.7
47.5°	373.8	372.6	375.1	369.5	369.0
50°	355.1	354.0	355.1	350.0	349.4
52.5°	336.0	334.0	334.2	329.1	329.0
55°	306.8	302.9	302.8	298.3	298.3
57.5°	275.9	270.8	271.3	267.4	266.8
60°	254.6	249.0	249.4	246.0	245.5
62.5°	233.6	227.2	228.5	224.7	224.5
65°	198.9	194.4	194.9	193.2	193.2
67.5°	165.5	161.3	164.3	163.0	162.8
70°	140.9	138.1	142.0	142.0	141.5
72.5°	118.2	118.1	123.0	123.0	123.3
75°	85.8	89.7	94.9	95.5	95.5
77.5°	57.3	64.2	69.9	70.1	70.0
80°	40.9	48.7	54.0	55.1	54.5
82.5°	27.7	36.0	40.3	41.5	40.9
85°	12.5	19.2	22.7	23.3	22.7
87.5°	4.1	8.5	10.9	11.1	10.5
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)