

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-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-100U-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

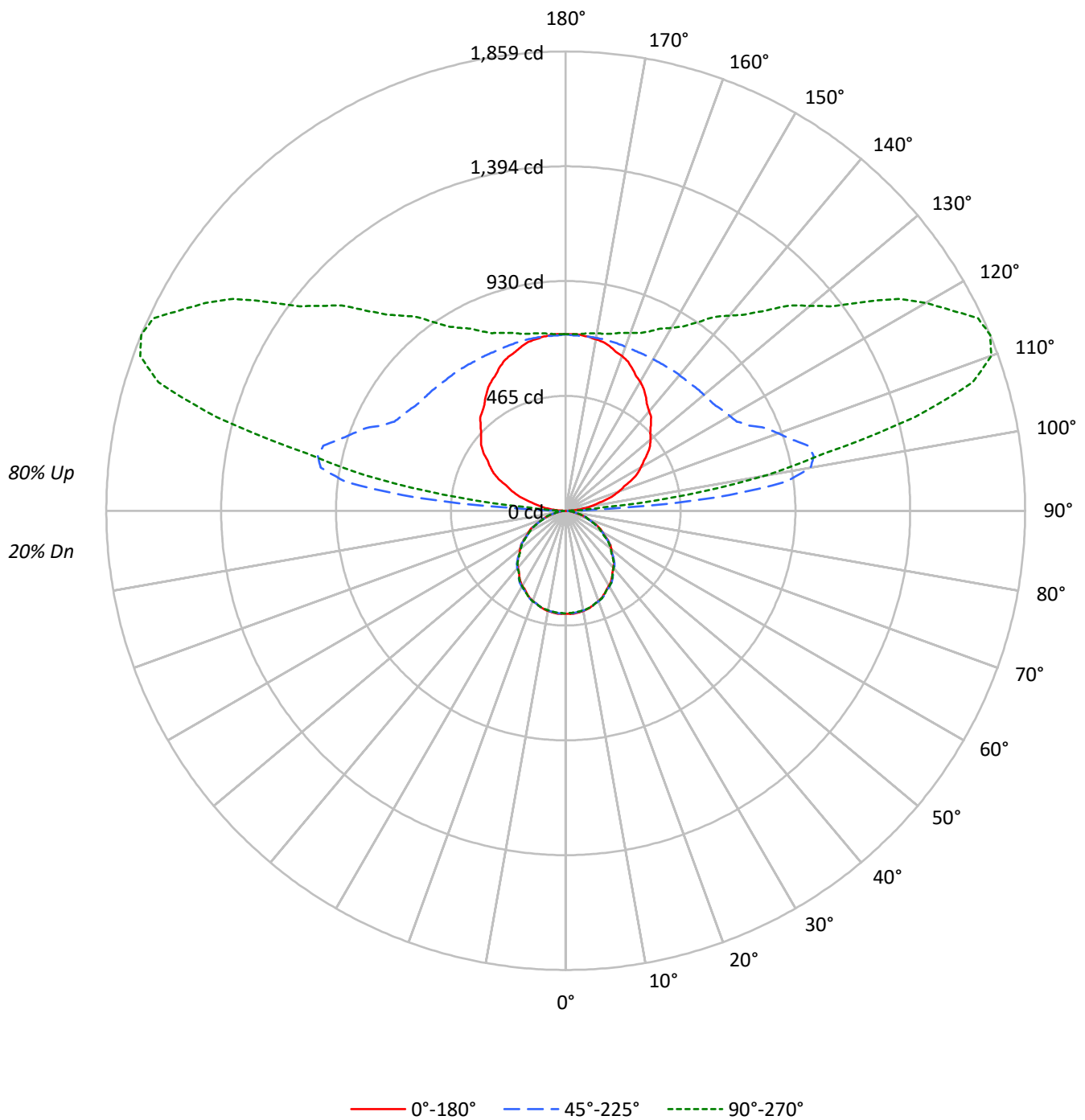
Lumens per Lamp: N/A
Luminaire Lumens: 5776.6 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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	0
RCR																		
0	100	100	100	100	88	88	88	88	66	66	66	47	47	47	28	28	28	20
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	25	24	24	17
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	75	67	60	54	66	59	53	49	45	41	38	32	29	27	19	18	17	12
4	69	59	51	46	61	52	46	41	40	35	32	28	25	23	17	16	15	10
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	16	14	13	9
6	58	46	39	33	51	41	35	30	32	27	24	23	20	17	14	12	11	8
7	53	42	34	29	47	37	31	26	29	24	21	20	17	15	13	11	10	7
8	49	38	30	25	43	34	27	23	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	31	24	20	24	19	16	17	14	12	11	9	8	5
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2561	2561	2561
5°	2580	2564	2554
10°	2574	2562	2554
15°	2560	2560	2558
20°	2544	2551	2551
25°	2519	2538	2530
30°	2489	2519	2508
35°	2452	2489	2472
40°	2411	2446	2421
45°	2368	2384	2348
50°	2305	2305	2269
55°	2233	2204	2170
60°	2124	2081	2048
65°	1963	1924	1908
70°	1719	1734	1726
75°	1383	1530	1540
80°	985	1296	1311
85°	600	1087	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 2384 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.4	0.7
10°-20°	113.1	2.0
20°-30°	171.2	3.0
30°-40°	205.3	3.6
40°-50°	209.3	3.6
50°-60°	182.7	3.2
60°-70°	130.8	2.3
70°-80°	67.4	1.2
80°-90°	18.5	0.3
90°-100°	334.3	5.8
100°-110°	923.0	16.0
110°-120°	951.9	16.5
120°-130°	765.0	13.2
130°-140°	601.2	10.4
140°-150°	461.1	8.0
150°-160°	331.4	5.7
160°-170°	202.6	3.5
170°-180°	68.3	1.2
0°-30°	323.7	5.6
0°-40°	529.0	9.2
0°-60°	921.1	15.9
0°-90°	1137.8	19.7
90°-120°	2209.3	38.2
90°-150°	4036.5	69.9
90°-180°	4639.0	80.3
0°-180°	5776.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	418	414	415	414	414	40
15°	402	399	402	402	402	113
25°	371	369	374	373	373	171
35°	326	326	332	329	329	204
45°	272	271	274	271	270	210
55°	208	206	206	202	202	186
65°	135	132	132	131	131	133
75°	58	61	64	65	65	63
85°	8	13	15	16	15	12
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°	416.4	416.4	416.4	416.4	416.4
2.5°	418.8	415.2	416.4	415.4	413.9
5°	417.9	413.7	415.2	414.0	413.7
7.5°	414.9	410.7	412.7	411.9	411.5
10°	412.1	408.0	410.2	409.4	409.0
12.5°	408.4	404.6	407.1	406.3	406.3
15°	402.1	398.7	402.1	402.1	401.7
17.5°	394.1	391.1	394.7	394.9	394.7
20°	388.6	385.2	389.8	389.4	389.8
22.5°	381.8	379.0	383.9	382.9	383.3
25°	371.2	368.6	373.9	372.8	372.8
27.5°	358.8	356.9	362.7	361.5	361.5
30°	350.4	348.5	354.7	353.1	353.1
32.5°	341.2	339.9	345.7	343.9	343.9
35°	326.5	325.8	331.5	329.2	329.2
37.5°	311.4	310.7	316.0	313.2	312.3
40°	300.3	299.9	304.6	301.5	301.5
42.5°	289.2	288.8	292.8	289.1	289.1
45°	272.2	271.4	274.1	270.6	269.9
47.5°	253.6	252.8	254.5	250.7	250.4
50°	240.9	240.2	240.9	237.5	237.1
52.5°	228.0	226.6	226.8	223.3	223.2
55°	208.2	205.5	205.5	202.4	202.4
57.5°	187.2	183.7	184.0	181.4	181.0
60°	172.7	168.9	169.2	166.9	166.5
62.5°	158.5	154.2	155.1	152.4	152.4
65°	134.9	131.9	132.2	131.1	131.1
67.5°	112.3	109.5	111.5	110.6	110.5
70°	95.6	93.7	96.4	96.4	96.0
72.5°	80.2	80.1	83.4	83.4	83.7
75°	58.2	60.9	64.4	64.8	64.8
77.5°	38.9	43.5	47.4	47.6	47.5
80°	27.8	33.0	36.6	37.4	37.0
82.5°	18.8	24.4	27.4	28.1	27.8
85°	8.5	13.0	15.4	15.8	15.4
87.5°	2.9	6.1	8.0	8.2	7.8
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)