

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-WB-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-WB-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

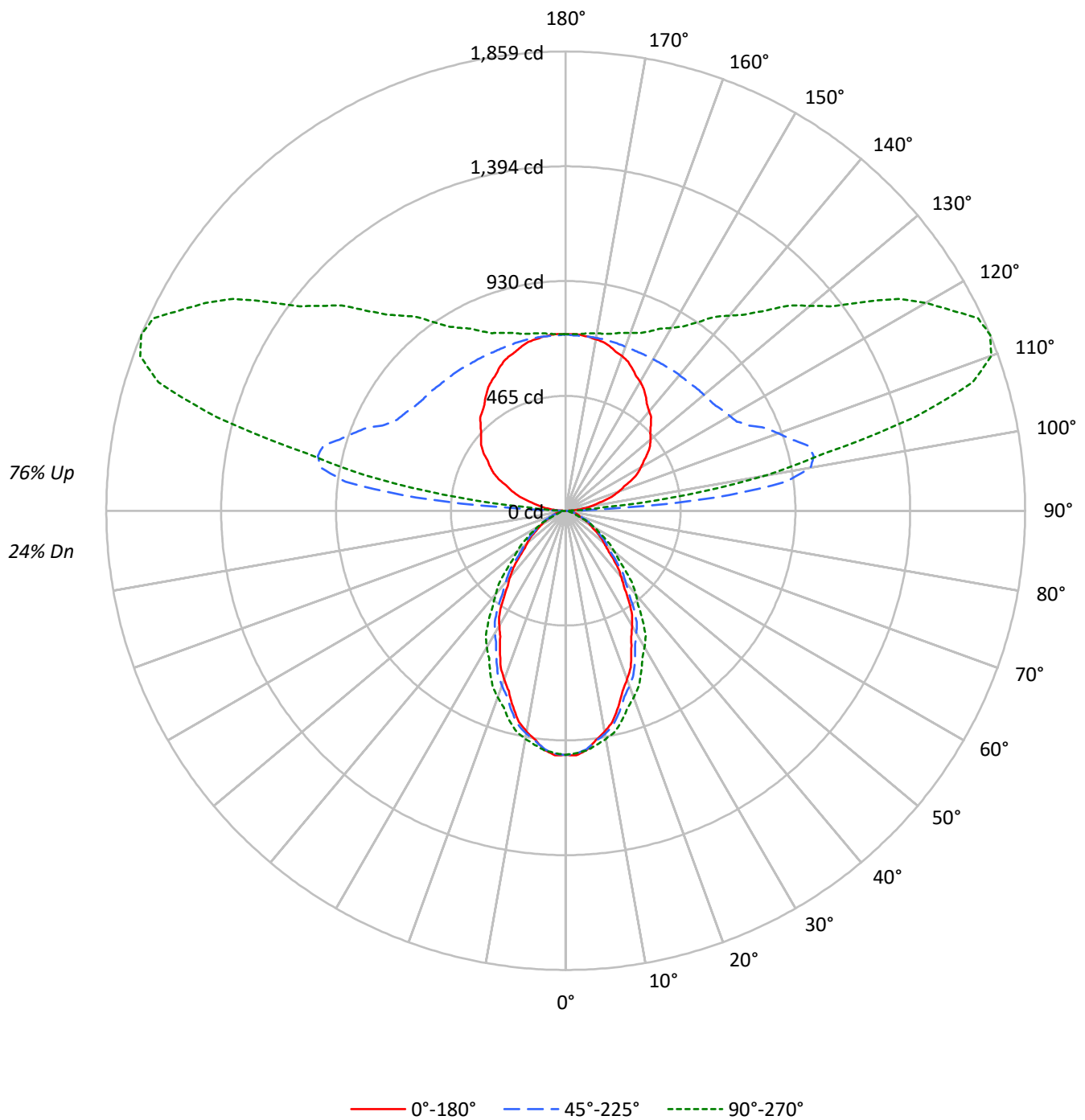
Lumens per Lamp: N/A
Luminaire Lumens: 6080.8 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	85	82	82	79	76	73	61	59	57	44	43	42	29	28	28	21
2	85	78	72	68	75	70	65	61	54	51	48	40	38	36	26	25	24	19
3	77	69	62	57	69	62	56	52	48	44	41	35	33	31	24	22	21	16
4	71	61	54	49	63	55	49	44	43	39	35	32	29	27	22	20	19	15
5	65	55	47	42	58	49	43	38	39	34	31	29	26	24	20	18	17	13
6	60	49	42	36	54	44	38	33	35	30	27	26	23	21	18	16	15	12
7	56	44	37	32	50	40	34	29	32	27	24	24	21	19	17	15	14	11
8	52	40	33	28	46	36	30	26	29	25	21	22	19	17	15	14	12	10
9	48	37	30	25	43	33	27	23	27	22	19	20	17	15	14	13	11	9
10	45	34	27	23	40	31	25	21	24	20	17	19	16	14	13	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6081	6081	6081
5°	6005	5984	6018
10°	5673	5725	5857
15°	5237	5358	5599
20°	4756	4935	5261
25°	4265	4498	4901
30°	3814	4064	4529
35°	3335	3576	4088
40°	2807	3030	3539
45°	2316	2516	2954
50°	1934	2109	2461
55°	1642	1809	2033
60°	1404	1568	1623
65°	1118	1320	1048
70°	991	1030	640
75°	917	834	392
80°	847	769	337
85°	762	706	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2954 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	1.5
10°-20°	235.9	3.9
20°-30°	305.5	5.0
30°-40°	299.2	4.9
40°-50°	229.0	3.8
50°-60°	152.6	2.5
60°-70°	83.3	1.4
70°-80°	34.7	0.6
80°-90°	11.3	0.2
90°-100°	334.3	5.5
100°-110°	923.0	15.2
110°-120°	951.9	15.7
120°-130°	765.0	12.6
130°-140°	601.2	9.9
140°-150°	461.1	7.6
150°-160°	331.4	5.4
160°-170°	202.6	3.3
170°-180°	68.3	1.1
0°-30°	632.0	10.4
0°-40°	931.2	15.3
0°-60°	1312.7	21.6
0°-90°	1442.0	23.7
90°-120°	2209.3	36.3
90°-150°	4036.5	66.4
90°-180°	4639.0	76.3
0°-180°	6080.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	989	989	989	989	989	
5°	972	963	969	971	975	90
15°	822	820	842	864	879	230
25°	628	630	663	692	722	289
35°	444	446	476	508	544	276
45°	266	271	289	311	340	208
55°	153	160	169	175	190	139
65°	77	83	91	79	72	80
75°	39	39	35	24	16	41
85°	11	11	10	6	4	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	988.6	988.6	988.6	988.6	988.6
2.5°	991.0	982.2	984.4	984.4	981.6
5°	972.5	962.8	969.1	971.3	974.7
7.5°	936.4	929.1	940.5	949.0	955.9
10°	908.3	902.0	916.6	928.9	937.8
12.5°	875.7	870.4	888.5	905.0	916.7
15°	822.4	819.5	841.5	864.4	879.3
17.5°	765.4	764.0	789.3	816.0	835.0
20°	726.6	726.2	753.9	781.7	803.8
22.5°	687.4	688.3	717.5	746.4	771.5
25°	628.5	630.2	662.8	691.7	722.2
27.5°	574.1	574.9	608.6	639.1	671.7
30°	537.0	539.1	572.2	603.7	637.7
32.5°	499.9	502.3	534.7	567.3	601.9
35°	444.2	446.3	476.3	508.3	544.4
37.5°	386.8	389.6	416.3	446.6	482.0
40°	349.6	353.9	377.4	405.9	440.7
42.5°	313.9	319.1	340.9	368.0	399.4
45°	266.3	271.4	289.3	311.2	339.6
47.5°	225.4	231.2	245.0	263.9	288.1
50°	202.1	207.7	220.4	234.3	257.2
52.5°	181.7	187.2	198.5	209.3	228.8
55°	153.1	159.5	168.7	175.1	189.6
57.5°	129.7	135.8	143.1	146.0	154.8
60°	114.1	120.9	127.5	127.2	131.9
62.5°	99.9	105.6	112.3	107.7	107.9
65°	76.8	83.1	90.7	79.2	72.0
67.5°	62.0	63.4	71.1	55.2	46.7
70°	55.1	55.1	57.3	42.8	35.6
72.5°	48.5	48.5	46.5	34.8	27.2
75°	38.6	38.6	35.1	24.1	16.5
77.5°	29.8	29.4	26.9	18.0	12.0
80°	23.9	23.9	21.7	14.2	9.5
82.5°	18.7	18.7	16.8	11.1	7.1
85°	10.8	10.8	10.0	6.4	3.9
87.5°	4.3	4.7	5.3	4.1	4.0
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)