

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-125D-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, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

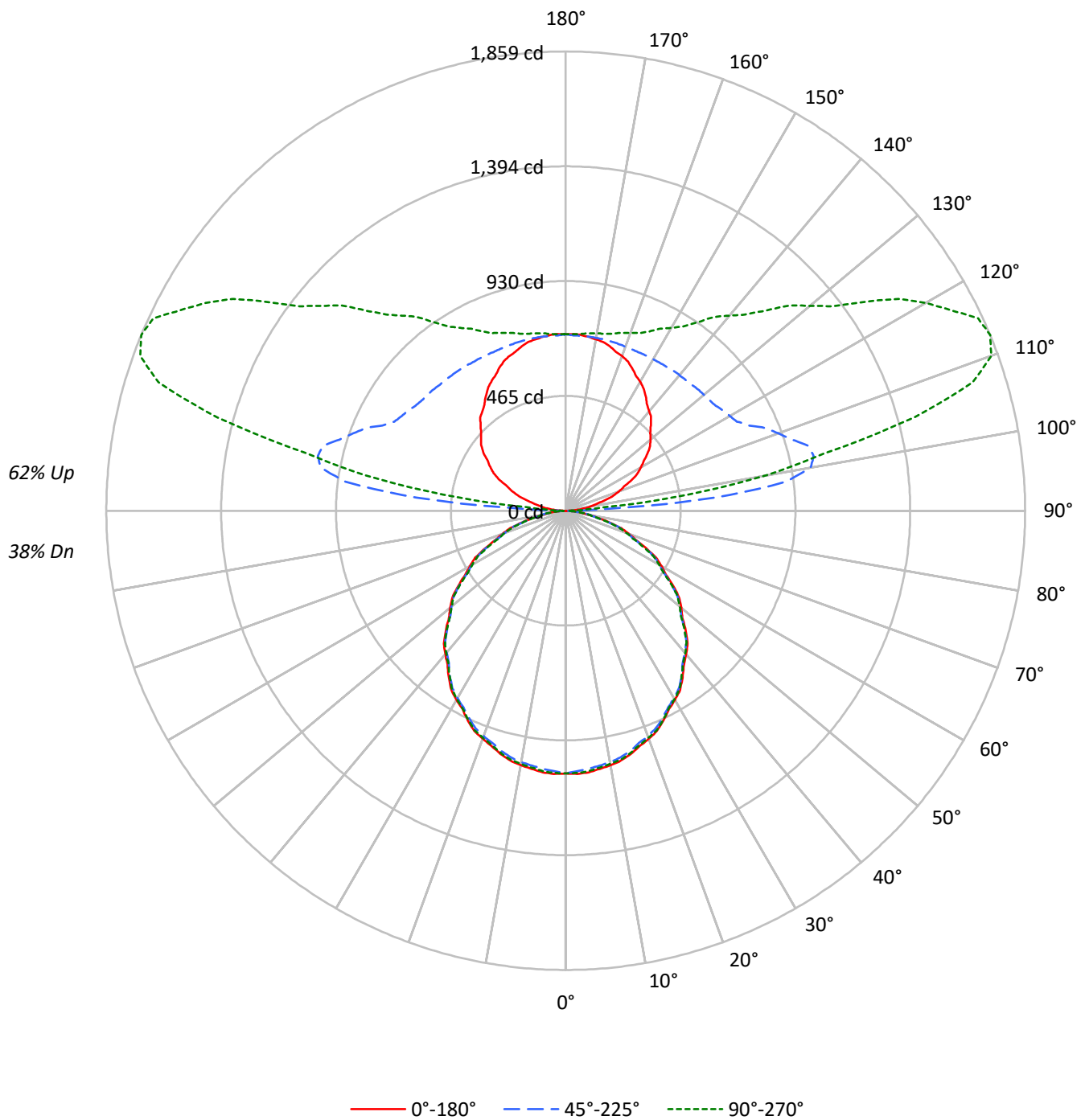
Lumens per Lamp: N/A
Luminaire Lumens: 7542.0 lumens
Efficiency: N/A
Efficacy: 70.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 107.3
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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32
3	79	70	62	57	71	63	57	52	52	47	44	41	38	35	31	29	27
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	25	23
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	30	25	21	24	21	18	19	16	14
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6542	6542	6542
5°	6563	6480	6534
10°	6533	6452	6504
15°	6489	6411	6463
20°	6429	6356	6406
25°	6356	6289	6340
30°	6278	6224	6256
35°	6189	6135	6140
40°	6086	6020	6040
45°	5972	5906	5917
50°	5842	5775	5758
55°	5693	5612	5599
60°	5509	5386	5357
65°	5222	5111	5043
70°	4863	4737	4674
75°	4325	4228	4104
80°	3524	3422	3400
85°	2110	2392	2392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5972 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	1.3
10°-20°	285.8	3.8
20°-30°	429.4	5.7
30°-40°	512.3	6.8
40°-50°	525.2	7.0
50°-60°	468.1	6.2
60°-70°	348.4	4.6
70°-80°	188.8	2.5
80°-90°	44.8	0.6
90°-100°	334.3	4.4
100°-110°	923.0	12.2
110°-120°	951.9	12.6
120°-130°	765.0	10.1
130°-140°	601.2	8.0
140°-150°	461.1	6.1
150°-160°	331.4	4.4
160°-170°	202.6	2.7
170°-180°	68.3	0.9
0°-30°	815.5	10.8
0°-40°	1327.9	17.6
0°-60°	2321.1	30.8
0°-90°	2903.2	38.5
90°-120°	2209.3	29.3
90°-150°	4036.5	53.5
90°-180°	4639.0	61.5
0°-180°	7542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1063	1061	1050	1059	1058	101
15°	1019	1017	1007	1016	1015	287
25°	936	935	927	932	934	431
35°	824	824	817	817	818	515
45°	687	685	679	678	680	529
55°	531	529	523	519	522	474
65°	359	356	351	349	346	355
75°	182	182	178	174	173	193
85°	30	34	34	34	34	41
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°	1063.6	1063.6	1063.6	1063.6	1063.6
2.5°	1066.8	1065.0	1055.6	1063.5	1062.2
5°	1063.0	1061.3	1049.5	1058.9	1058.3
7.5°	1054.0	1051.8	1041.1	1049.8	1048.8
10°	1046.0	1044.3	1033.1	1041.9	1041.3
12.5°	1036.2	1034.5	1023.3	1032.1	1032.0
15°	1019.1	1016.8	1006.8	1015.6	1015.0
17.5°	998.6	996.0	986.1	993.0	994.1
20°	982.2	980.5	971.1	977.5	978.7
22.5°	965.3	963.2	953.3	960.7	961.8
25°	936.5	934.8	926.6	931.9	934.2
27.5°	904.9	904.9	897.3	901.1	902.5
30°	883.9	883.9	876.3	878.6	880.9
32.5°	861.4	859.6	852.4	854.3	856.6
35°	824.2	823.6	817.1	817.1	817.7
37.5°	785.6	784.0	777.0	777.5	780.3
40°	758.0	756.9	749.8	749.9	752.2
42.5°	729.9	728.8	722.7	721.7	722.7
45°	686.6	684.9	679.0	677.9	680.2
47.5°	640.5	640.9	633.9	632.3	633.6
50°	610.5	610.5	603.5	600.0	601.7
52.5°	579.1	578.2	571.2	567.3	571.3
55°	530.9	529.2	523.3	519.3	522.1
57.5°	481.5	478.9	473.0	468.5	470.1
60°	447.8	443.8	437.8	434.3	435.5
62.5°	412.7	410.5	404.1	398.8	401.3
65°	358.8	356.5	351.2	348.8	346.5
67.5°	306.0	304.5	298.5	296.0	294.5
70°	270.4	267.6	263.4	260.5	259.9
72.5°	235.8	232.5	228.3	225.8	224.3
75°	182.0	182.0	177.9	174.4	172.7
77.5°	130.9	131.3	128.0	126.8	126.0
80°	99.5	99.5	96.6	95.4	96.0
82.5°	69.5	70.9	69.9	68.2	67.4
85°	29.9	33.9	33.9	34.5	33.9
87.5°	5.6	9.3	10.7	10.0	9.3
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

TEST NUMBER:

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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)