

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-150U-100D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

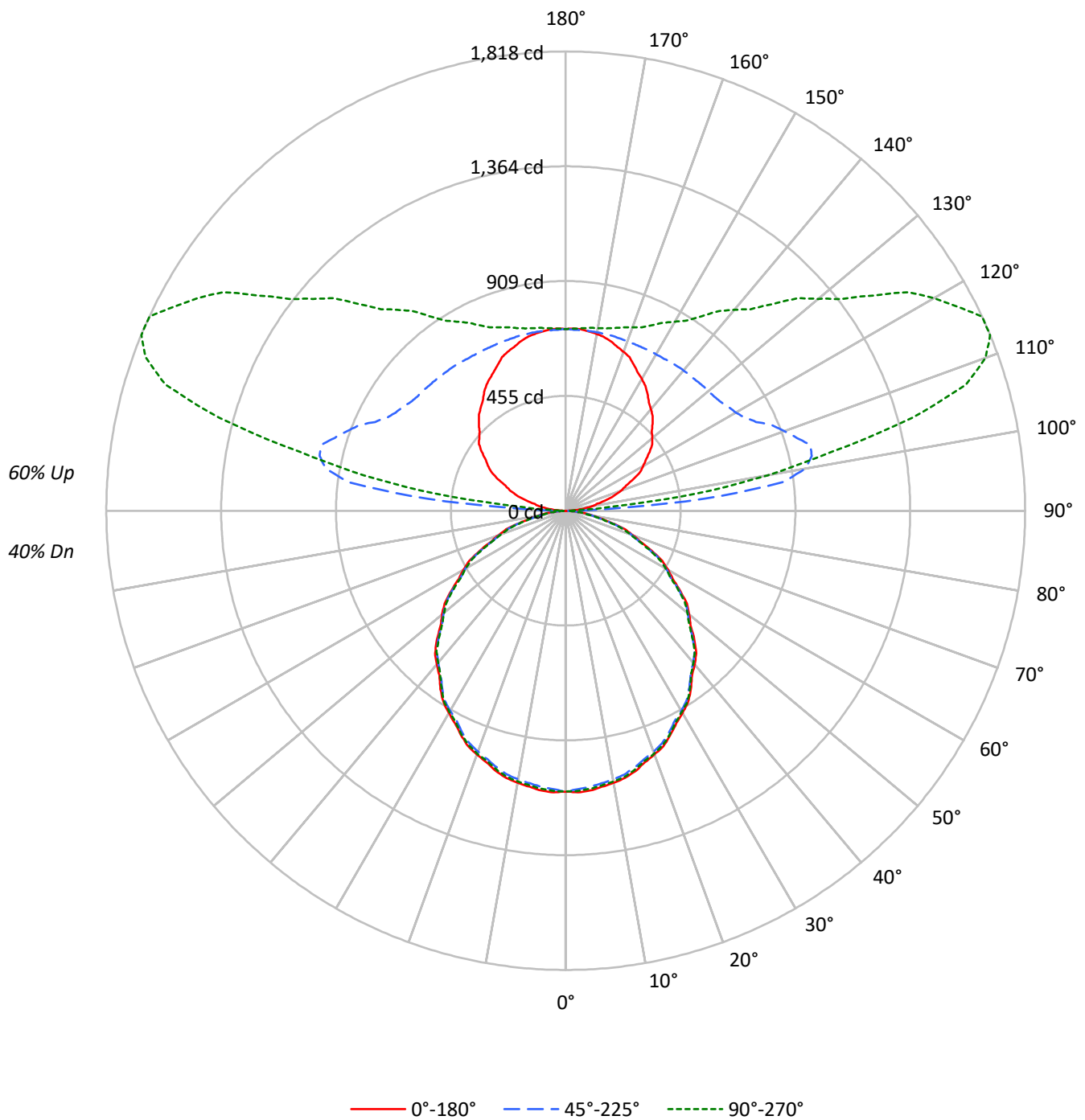
Lumens per Lamp: N/A
Luminaire Lumens: 7672.1 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10257	10257	10257
5°	10303	10162	10239
10°	10251	10123	10200
15°	10189	10050	10130
20°	10083	9964	10046
25°	9973	9857	9935
30°	9852	9747	9796
35°	9729	9609	9659
40°	9567	9457	9465
45°	9398	9269	9239
50°	9156	9047	9024
55°	8886	8787	8726
60°	8617	8462	8435
65°	8195	8012	7947
70°	7615	7432	7286
75°	6802	6584	6445
80°	5595	5393	5148
85°	3313	3631	3716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9398 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	1.4
10°-20°	298.8	3.9
20°-30°	448.7	5.8
30°-40°	535.5	7.0
40°-50°	548.9	7.2
50°-60°	488.8	6.4
60°-70°	364.4	4.7
70°-80°	197.3	2.6
80°-90°	46.4	0.6
90°-100°	334.3	4.4
100°-110°	904.0	11.8
110°-120°	950.4	12.4
120°-130°	772.0	10.1
130°-140°	605.6	7.9
140°-150°	464.8	6.1
150°-160°	334.3	4.4
160°-170°	204.2	2.7
170°-180°	68.8	0.9
0°-30°	852.4	11.1
0°-40°	1388.0	18.1
0°-60°	2425.6	31.6
0°-90°	3033.7	39.5
90°-120°	2188.8	28.5
90°-150°	4031.1	52.5
90°-180°	4638.0	60.5
0°-180°	7672.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1112	1110	1097	1107	1106	105
15°	1067	1063	1052	1061	1061	301
25°	980	978	968	974	976	451
35°	864	860	853	855	858	539
45°	720	717	710	707	708	554
55°	552	553	546	541	542	494
65°	375	374	367	363	364	371
75°	191	188	185	181	181	203
85°	31	34	34	35	35	44
90°	2	5	10	11	10	4
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1111.7	1111.7	1111.7	1111.7	1111.7
2.5°	1116.0	1113.6	1103.8	1111.7	1110.5
5°	1112.5	1110.3	1097.2	1107.1	1105.6
7.5°	1102.1	1099.9	1088.4	1097.5	1096.2
10°	1094.2	1091.9	1080.5	1089.6	1088.8
12.5°	1083.8	1081.6	1070.1	1079.2	1078.5
15°	1066.7	1063.0	1052.2	1060.6	1060.6
17.5°	1044.1	1041.3	1031.3	1038.3	1038.5
20°	1027.0	1024.8	1014.8	1022.5	1023.2
22.5°	1009.9	1007.7	996.5	1003.6	1004.9
25°	979.7	977.5	968.3	973.7	975.9
27.5°	948.6	945.3	936.2	941.0	942.6
30°	924.8	923.3	914.9	917.2	919.5
32.5°	899.8	898.3	891.1	892.2	896.3
35°	863.8	860.0	853.1	854.7	857.6
37.5°	821.2	819.4	812.6	811.8	814.6
40°	794.3	791.3	785.2	783.7	785.9
42.5°	765.0	762.0	754.6	753.2	756.0
45°	720.3	716.6	710.4	706.6	708.1
47.5°	670.2	670.2	663.8	659.5	661.7
50°	637.9	637.9	630.3	626.5	628.7
52.5°	604.3	604.9	596.7	594.7	593.9
55°	552.4	553.2	546.3	541.0	542.5
57.5°	502.4	500.7	492.8	489.3	490.0
60°	467.0	464.7	458.6	453.3	457.1
62.5°	431.0	429.9	423.8	417.8	417.4
65°	375.4	373.9	367.0	363.2	364.0
67.5°	320.2	318.4	312.1	306.6	308.6
70°	282.3	282.3	275.5	272.4	270.1
72.5°	247.5	244.5	239.4	235.1	233.5
75°	190.8	188.5	184.7	180.8	180.8
77.5°	138.9	136.9	134.4	131.8	131.1
80°	105.3	104.6	101.5	100.6	96.9
82.5°	74.2	74.0	72.2	70.2	70.0
85°	31.3	34.3	34.3	35.1	35.1
87.5°	5.8	10.0	10.6	9.5	9.3
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)