

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-PR1-150U-100D-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-100D-927-1D-UNV-STD-W-6
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

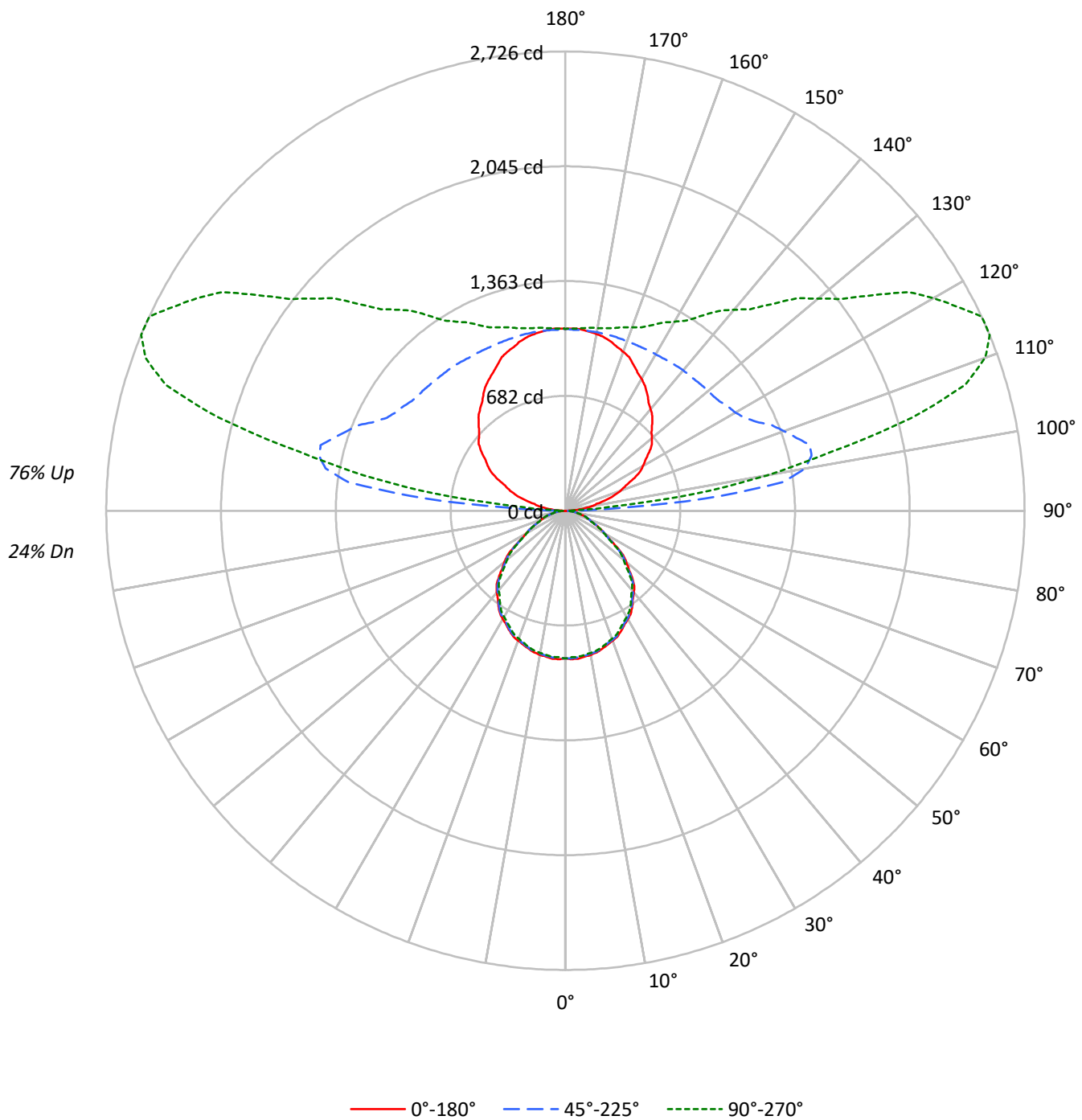
Lumens per Lamp: N/A
Luminaire Lumens: 9151.4 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 112.7
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32
1	92	88	84	81	82	78	75	73	60	58	57	44	43	42	29	28	27
2	84	77	71	66	74	69	64	60	53	50	47	39	37	35	25	24	23
3	77	68	61	55	68	60	55	50	47	43	40	34	32	30	23	21	20
4	70	60	52	47	62	53	47	42	42	37	34	31	28	25	20	19	17
5	64	53	45	40	57	48	41	36	37	32	29	27	24	22	18	16	15
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	10
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	9
10	44	32	25	21	39	29	23	19	23	18	15	17	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5392	5392	5392
5°	5441	5399	5370
10°	5423	5386	5358
15°	5399	5366	5337
20°	5373	5338	5298
25°	5334	5298	5237
30°	5277	5239	5164
35°	5199	5154	5080
40°	5081	5026	4935
45°	4874	4788	4689
50°	4509	4400	4314
55°	3936	3847	3765
60°	3317	3288	3223
65°	2869	2879	2857
70°	2635	2647	2647
75°	2531	2531	2548
80°	2380	2409	2380
85°	1920	2131	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4874 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	0.9
10°-20°	237.2	2.6
20°-30°	357.7	3.9
30°-40°	426.3	4.7
40°-50°	420.3	4.6
50°-60°	321.2	3.5
60°-70°	198.8	2.2
70°-80°	112.9	1.2
80°-90°	36.6	0.4
90°-100°	501.5	5.5
100°-110°	1356.0	14.8
110°-120°	1425.6	15.6
120°-130°	1158.0	12.7
130°-140°	908.4	9.9
140°-150°	697.2	7.6
150°-160°	501.4	5.5
160°-170°	306.3	3.3
170°-180°	103.3	1.1
0°-30°	677.8	7.4
0°-40°	1104.1	12.1
0°-60°	1845.5	20.2
0°-90°	2193.8	24.0
90°-120°	3283.2	35.9
90°-150°	6046.7	66.1
90°-180°	6958.0	76.0
0°-180°	9151.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	881	872	874	871	870	84
15°	848	839	843	840	838	239
25°	786	776	781	772	772	362
35°	692	684	686	677	676	432
45°	560	553	550	541	539	429
55°	367	361	359	353	351	329
65°	197	196	198	196	196	200
75°	106	106	106	107	107	112
85°	27	29	30	30	30	32
90°	2	7	15	16	15	6
95°	78	273	834	432	257	81
105°	252	390	1504	2219	2128	265
115°	444	543	1248	2415	2726	438
125°	608	696	1124	1898	2229	542
135°	728	815	1094	1532	1734	563
145°	847	910	1079	1311	1411	530
155°	956	994	1070	1176	1215	441
165°	1041	1051	1074	1116	1122	293
175°	1080	1079	1076	1090	1087	103
180°	1079	1079	1079	1079	1079	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.6	876.6	876.6	876.6	876.6
2.5°	882.1	874.4	876.6	874.7	870.6
5°	881.2	871.6	874.4	871.3	869.8
7.5°	874.4	864.9	867.7	864.7	863.8
10°	868.3	859.5	862.3	859.2	857.8
12.5°	861.7	852.2	855.7	852.0	850.5
15°	847.9	839.1	842.7	839.6	838.1
17.5°	832.8	823.4	827.0	823.4	821.5
20°	820.8	811.9	815.5	810.2	809.4
22.5°	807.5	798.6	802.2	795.1	794.9
25°	786.0	776.4	780.7	772.4	771.7
27.5°	760.5	751.7	755.2	746.7	745.9
30°	743.0	734.1	737.7	728.6	727.1
32.5°	723.1	714.8	717.8	708.7	707.8
35°	692.4	684.3	686.4	677.3	676.5
37.5°	657.5	650.1	651.3	641.3	640.6
40°	632.8	625.4	626.0	615.4	614.6
42.5°	605.6	598.2	597.6	587.0	586.2
45°	560.3	552.9	550.4	540.6	539.1
47.5°	508.6	501.2	496.7	488.7	487.6
50°	471.2	463.8	459.8	453.0	450.8
52.5°	430.7	423.3	420.0	413.7	411.5
55°	367.0	361.1	358.7	352.6	351.1
57.5°	306.4	302.4	301.7	295.8	295.2
60°	269.6	267.3	267.3	262.0	262.0
62.5°	238.2	236.5	237.7	234.2	233.6
65°	197.1	195.6	197.8	196.3	196.3
67.5°	164.6	164.6	166.0	165.4	165.4
70°	146.5	146.5	147.2	147.2	147.2
72.5°	130.2	129.6	131.5	131.5	130.9
75°	106.5	106.5	106.5	107.2	107.2
77.5°	82.9	83.1	83.7	83.5	82.9
80°	67.2	67.9	68.0	67.2	67.2
82.5°	51.5	52.2	52.3	52.1	51.5
85°	27.2	28.7	30.2	30.2	30.2
87.5°	8.3	11.6	15.1	15.3	14.5
90°	2.3	6.9	15.1	16.2	15.1
92.5°	33.0	120.2	237.2	103.0	74.6
95°	77.8	273.2	834.0	431.6	256.7
97.5°	125.0	313.3	1300.1	1075.9	790.1
100°	160.3	329.5	1445.1	1507.0	1218.5
102.5°	192.8	352.1	1496.2	1833.9	1618.1
105°	252.1	389.5	1504.3	2219.0	2128.1
107.5°	306.9	432.3	1438.6	2459.1	2489.4
110°	349.6	463.2	1380.0	2523.6	2652.0

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	387.7	494.1	1326.1	2510.7	2726.3
115°	443.7	542.6	1247.6	2415.1	2726.3
117.5°	498.6	591.2	1195.8	2269.0	2621.8
120°	532.0	622.9	1165.1	2164.2	2524.2
122.5°	563.6	652.7	1146.5	2051.8	2414.5
125°	607.5	696.1	1124.4	1897.5	2229.1
127.5°	648.0	735.0	1111.4	1771.6	2063.3
130°	670.3	760.0	1105.9	1693.8	1957.3
132.5°	693.5	782.3	1100.3	1623.7	1866.3
135°	728.3	814.7	1094.2	1532.1	1734.3
137.5°	763.4	845.0	1089.1	1457.9	1622.6
140°	787.6	863.7	1087.3	1410.1	1556.6
142.5°	810.8	882.4	1083.6	1366.9	1495.2
145°	846.8	910.4	1079.1	1311.4	1411.4
147.5°	879.6	935.9	1074.0	1261.2	1338.0
150°	903.7	953.7	1072.2	1233.9	1295.2
152.5°	926.0	969.7	1071.2	1208.5	1259.0
155°	956.0	993.5	1069.9	1176.4	1215.1
157.5°	987.1	1013.3	1070.1	1154.1	1179.5
160°	1004.8	1026.4	1071.0	1140.0	1158.1
162.5°	1018.7	1036.7	1071.9	1128.7	1142.3
165°	1040.8	1051.0	1074.5	1116.4	1122.1
167.5°	1055.9	1063.0	1074.7	1105.9	1108.7
170°	1065.2	1068.6	1075.7	1101.2	1101.2
172.5°	1072.6	1073.3	1075.7	1095.6	1094.7
175°	1080.3	1079.2	1075.7	1089.5	1087.3
177.5°	1082.9	1080.1	1075.4	1084.7	1081.9
180°	1079.1	1079.1	1079.1	1079.1	1079.1

(END OF REPORT)