

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-PW1-150U-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

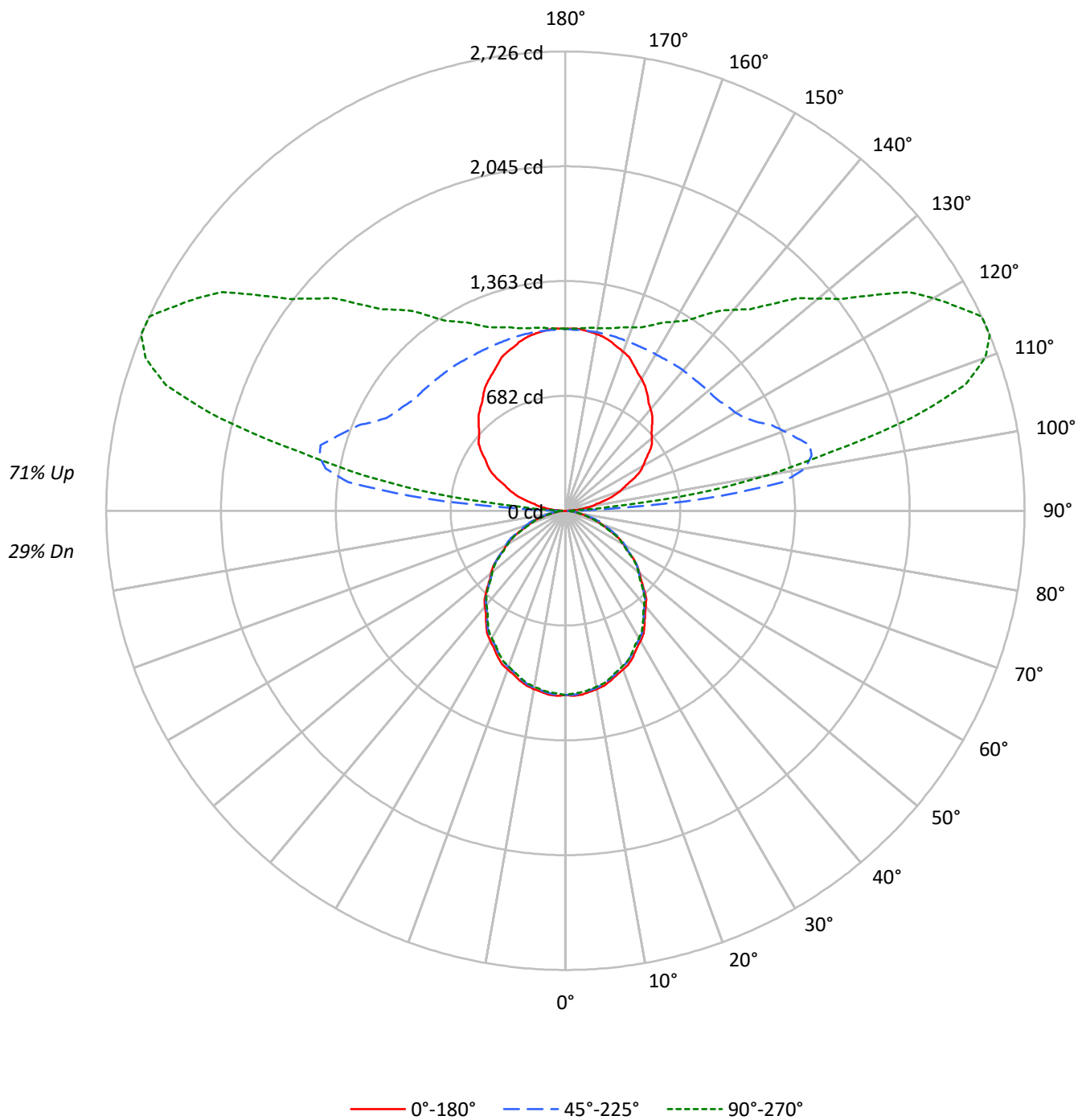
Lumens per Lamp: N/A
Luminaire Lumens: 9742.0 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 127.1
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	93	89	85	82	83	80	77	74	63	60	59	47	45	44	32	32	31	24
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	28	27	26	20
3	77	68	61	56	69	61	55	51	48	44	41	36	34	31	25	24	22	17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15
5	65	54	46	40	58	48	42	37	38	33	30	29	26	23	20	18	17	13
6	59	48	40	35	53	43	36	32	34	29	26	26	23	20	18	16	15	11
7	55	43	35	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	26	45	35	29	24	28	23	20	22	18	16	15	13	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6726	6726	6726
5°	6769	6716	6686
10°	6715	6661	6625
15°	6644	6570	6546
20°	6565	6464	6451
25°	6473	6355	6336
30°	6336	6240	6200
35°	6156	6069	6033
40°	5964	5871	5848
45°	5732	5657	5631
50°	5494	5449	5411
55°	5238	5238	5155
60°	4918	5013	4836
65°	4502	4726	4389
70°	3967	4348	3863
75°	3389	3893	3296
80°	2628	3276	2660
85°	1701	2512	2244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5732 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	1.1
10°-20°	290.7	3.0
20°-30°	431.2	4.4
30°-40°	504.6	5.2
40°-50°	502.3	5.2
50°-60°	433.8	4.5
60°-70°	312.2	3.2
70°-80°	163.7	1.7
80°-90°	42.8	0.4
90°-100°	501.5	5.1
100°-110°	1356.0	13.9
110°-120°	1425.6	14.6
120°-130°	1158.0	11.9
130°-140°	908.4	9.3
140°-150°	697.2	7.2
150°-160°	501.4	5.1
160°-170°	306.3	3.1
170°-180°	103.3	1.1
0°-30°	824.9	8.5
0°-40°	1329.5	13.6
0°-60°	2265.5	23.3
0°-90°	2784.4	28.6
90°-120°	3283.2	33.7
90°-150°	6046.7	62.1
90°-180°	6958.0	71.4
0°-180°	9742.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1096	1084	1088	1085	1083	104
15°	1043	1030	1032	1030	1028	294
25°	954	938	936	931	934	439
35°	820	809	808	801	804	513
45°	659	653	650	648	647	508
55°	488	488	488	482	481	436
65°	309	319	325	312	302	306
75°	143	156	164	153	139	153
85°	24	32	36	34	32	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.5	1093.5	1093.5	1093.5	1093.5
2.5°	1099.6	1090.6	1093.5	1091.0	1085.8
5°	1096.4	1084.1	1087.7	1084.8	1082.9
7.5°	1085.2	1073.9	1076.5	1073.4	1072.3
10°	1075.2	1063.9	1066.5	1062.6	1060.7
12.5°	1063.6	1051.6	1054.2	1050.3	1049.2
15°	1043.4	1030.2	1031.8	1029.9	1028.0
17.5°	1019.9	1006.5	1006.8	1003.7	1003.3
20°	1002.9	988.8	987.5	983.7	985.6
22.5°	984.4	969.5	968.2	962.9	965.5
25°	953.8	937.8	936.4	930.7	933.6
27.5°	918.3	902.5	902.5	894.5	897.5
30°	892.1	877.1	878.6	869.1	872.9
32.5°	864.4	850.8	851.7	842.1	845.9
35°	819.9	808.6	808.3	800.7	803.5
37.5°	774.4	764.4	762.8	758.4	759.2
40°	742.8	734.3	731.2	728.3	728.3
42.5°	709.7	701.9	698.9	696.7	696.0
45°	659.0	653.3	650.3	648.4	647.4
47.5°	608.9	603.6	601.0	599.6	598.7
50°	574.2	570.4	569.4	566.5	565.5
52.5°	539.5	537.3	536.2	532.6	531.6
55°	488.5	487.5	488.5	481.7	480.7
57.5°	435.3	436.8	439.9	430.8	428.5
60°	399.8	403.6	407.5	396.8	393.1
62.5°	363.6	369.6	375.2	362.9	357.6
65°	309.3	318.7	324.7	311.9	301.6
67.5°	256.8	268.5	275.7	262.0	250.3
70°	220.6	233.8	241.8	228.0	214.8
72.5°	189.0	203.7	210.2	197.2	184.0
75°	142.6	155.8	163.8	152.9	138.7
77.5°	101.2	113.6	120.2	110.7	99.0
80°	74.2	87.4	92.5	84.6	75.1
82.5°	52.6	63.5	67.1	62.3	55.9
85°	24.1	31.6	35.6	33.7	31.8
87.5°	6.6	12.8	17.7	17.9	18.4
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

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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)