

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-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-PR1-150U-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

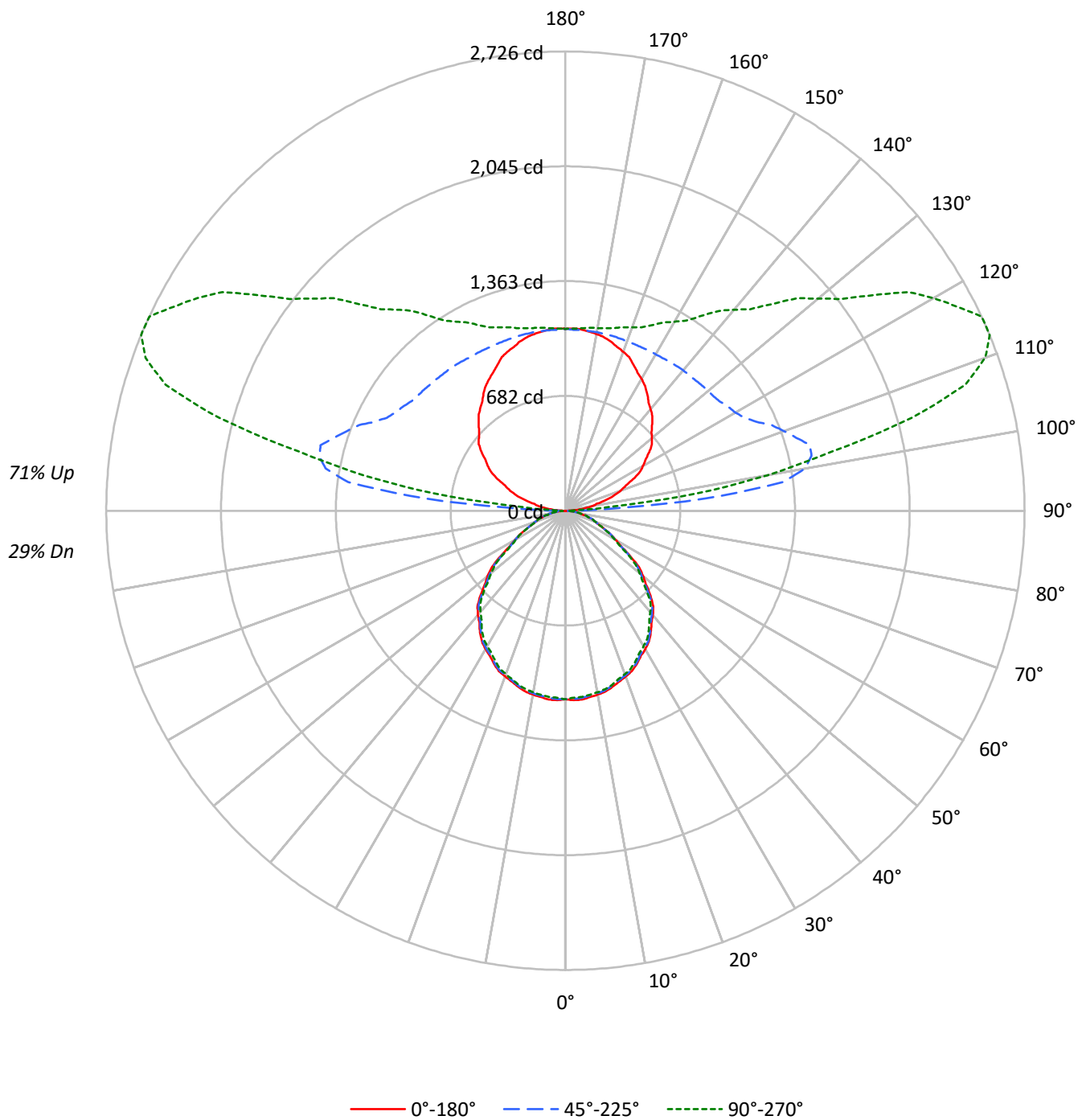
Lumens per Lamp: N/A
Luminaire Lumens: 9756.6 lumens
Efficiency: N/A
Efficacy: 76.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	32	32	31
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	29	28	26
3	78	69	62	56	69	62	56	51	49	45	41	37	34	32	26	24	23
4	71	61	53	47	63	55	48	43	43	39	35	33	30	27	23	21	20
5	65	54	46	40	58	49	42	37	39	34	30	29	26	24	21	19	17
6	60	48	41	35	53	44	37	32	35	30	26	27	23	21	19	17	15
7	55	43	36	31	49	39	33	28	31	27	23	24	21	18	17	15	13
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12
9	47	36	29	24	43	32	26	22	26	21	18	20	17	14	15	12	11
10	44	33	26	21	40	30	24	20	24	19	16	19	15	13	13	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6881	6881	6881
5°	6943	6889	6853
10°	6921	6873	6837
15°	6891	6847	6811
20°	6856	6812	6762
25°	6808	6762	6684
30°	6734	6686	6590
35°	6635	6577	6483
40°	6484	6414	6297
45°	6219	6110	5985
50°	5754	5615	5505
55°	5022	4908	4805
60°	4232	4196	4114
65°	3660	3675	3646
70°	3361	3379	3379
75°	3230	3230	3251
80°	3039	3071	3039
85°	2449	2717	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6219 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.8	1.1
10°-20°	302.7	3.1
20°-30°	456.5	4.7
30°-40°	544.0	5.6
40°-50°	536.3	5.5
50°-60°	409.9	4.2
60°-70°	253.6	2.6
70°-80°	144.1	1.5
80°-90°	46.1	0.5
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	7.1
150°-160°	501.4	5.1
160°-170°	306.3	3.1
170°-180°	103.3	1.1
0°-30°	865.0	8.9
0°-40°	1409.0	14.4
0°-60°	2355.1	24.1
0°-90°	2798.9	28.7
90°-120°	3283.2	33.7
90°-150°	6046.7	62.0
90°-180°	6958.0	71.3
0°-180°	9756.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1124	1112	1116	1112	1110	107
15°	1082	1071	1075	1072	1070	305
25°	1003	991	996	986	985	462
35°	884	873	876	864	863	551
45°	715	706	702	690	688	548
55°	468	461	458	450	448	420
65°	252	250	252	250	250	255
75°	136	136	136	137	137	143
85°	35	37	38	38	38	40
90°	2	7	15	16	15	7
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°	1118.7	1118.7	1118.7	1118.7	1118.7
2.5°	1125.6	1115.8	1118.7	1116.3	1111.0
5°	1124.5	1112.2	1115.8	1111.9	1110.0
7.5°	1115.8	1103.8	1107.3	1103.5	1102.3
10°	1108.1	1096.8	1100.4	1096.5	1094.6
12.5°	1099.6	1087.6	1091.9	1087.3	1085.4
15°	1082.1	1070.8	1075.3	1071.5	1069.6
17.5°	1062.8	1050.8	1055.3	1050.8	1048.4
20°	1047.4	1036.1	1040.7	1033.9	1033.0
22.5°	1030.4	1019.1	1023.7	1014.6	1014.5
25°	1003.1	990.8	996.3	985.7	984.8
27.5°	970.5	959.2	963.8	952.9	951.8
30°	948.2	936.9	941.4	929.8	927.9
32.5°	922.7	912.2	916.0	904.4	903.3
35°	883.6	873.2	875.9	864.3	863.4
37.5°	839.1	829.7	831.2	818.4	817.5
40°	807.5	798.1	798.8	785.3	784.3
42.5°	772.8	763.4	762.6	749.1	748.1
45°	715.0	705.6	702.4	689.9	688.0
47.5°	649.1	639.6	633.8	623.6	622.3
50°	601.3	591.8	586.8	578.1	575.3
52.5°	549.6	540.2	535.9	528.0	525.1
55°	468.3	460.8	457.7	449.9	448.1
57.5°	391.0	385.9	385.0	377.5	376.8
60°	344.0	341.2	341.1	334.4	334.4
62.5°	303.9	301.8	303.3	298.9	298.1
65°	251.5	249.6	252.5	250.5	250.5
67.5°	210.1	210.1	211.8	211.0	211.0
70°	186.9	186.9	187.9	187.9	187.9
72.5°	166.1	165.4	167.9	167.8	167.1
75°	135.9	135.9	135.9	136.8	136.8
77.5°	105.8	106.0	106.8	106.6	105.8
80°	85.8	86.7	86.7	85.8	85.8
82.5°	65.7	66.7	66.7	66.5	65.7
85°	34.7	36.6	38.5	38.5	38.5
87.5°	10.5	14.4	18.4	18.6	17.7
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)