

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-075D-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-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

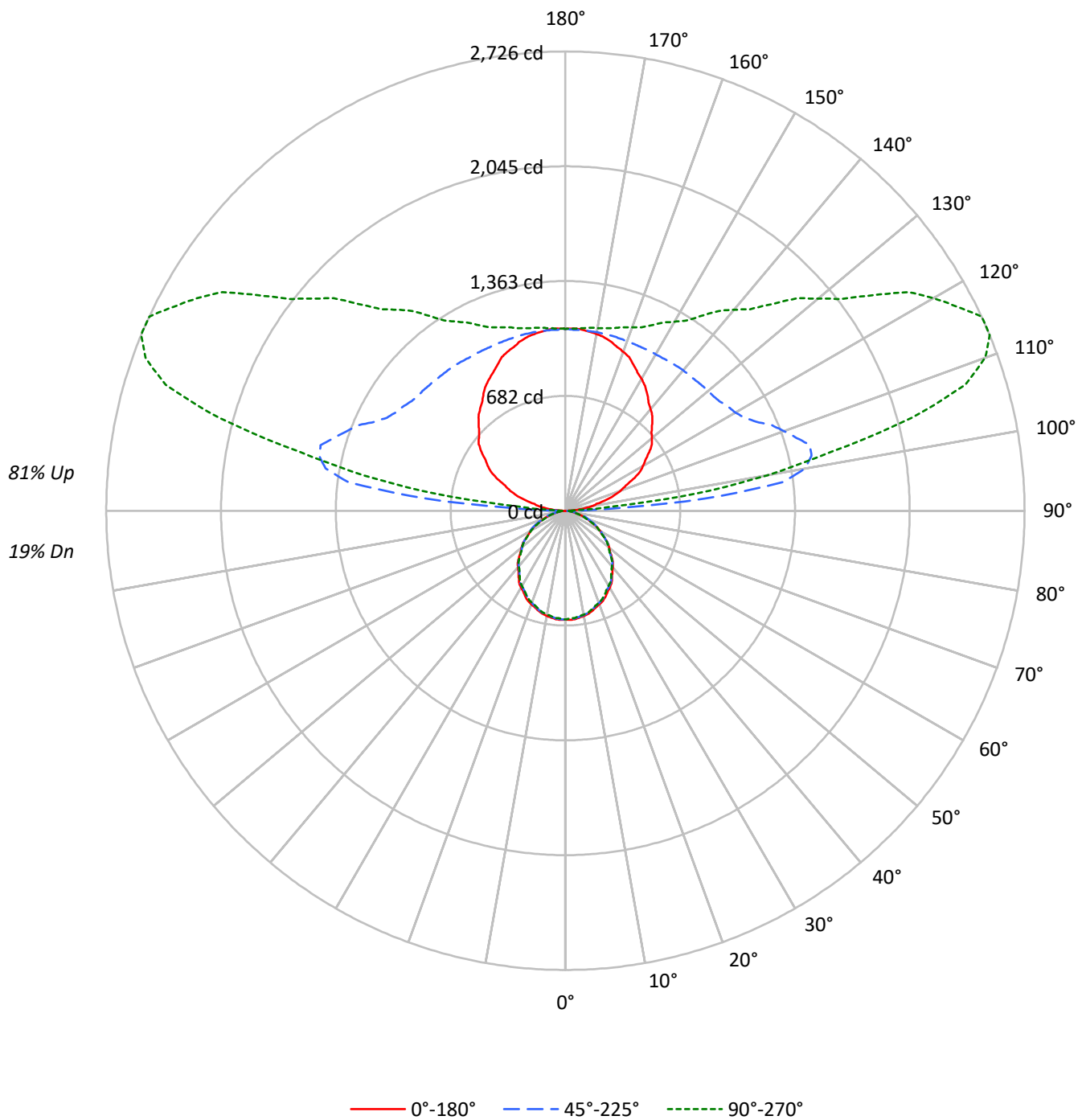
Lumens per Lamp: N/A
Luminaire Lumens: 8600.7 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 97.8
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

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-150U-075D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-150U-075D-927-1D-UNV-STD-W-6

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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	91	87	83	80	80	77	74	71	58	56	54	41	39	38	25	24	23
2	83	76	70	65	73	67	62	58	51	47	45	36	34	32	22	21	20
3	75	67	60	54	66	59	53	49	45	41	38	31	29	27	19	18	17
4	69	59	51	46	61	52	46	41	40	35	32	28	25	23	17	16	14
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	13
6	58	47	39	33	51	41	35	30	32	27	24	22	19	17	14	12	11
7	53	42	34	29	47	37	31	26	28	24	21	20	17	15	13	11	10
8	49	38	30	25	43	34	27	23	26	21	18	18	16	13	12	10	9
9	46	34	27	22	40	31	24	20	24	19	16	17	14	12	11	9	8
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3967	3967	3967
5°	3992	3961	3943
10°	3960	3929	3907
15°	3918	3875	3861
20°	3872	3812	3805
25°	3817	3748	3737
30°	3737	3680	3656
35°	3630	3579	3558
40°	3518	3463	3449
45°	3380	3336	3321
50°	3240	3213	3191
55°	3089	3089	3040
60°	2901	2956	2852
65°	2655	2787	2588
70°	2340	2564	2279
75°	1999	2296	1944
80°	1551	1930	1569
85°	1002	1482	1327

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3380 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-150U-075D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	0.7
10°-20°	171.4	2.0
20°-30°	254.3	3.0
30°-40°	297.6	3.5
40°-50°	296.2	3.4
50°-60°	255.8	3.0
60°-70°	184.1	2.1
70°-80°	96.6	1.1
80°-90°	26.2	0.3
90°-100°	501.5	5.8
100°-110°	1356.0	15.8
110°-120°	1425.6	16.6
120°-130°	1158.0	13.5
130°-140°	908.4	10.6
140°-150°	697.2	8.1
150°-160°	501.4	5.8
160°-170°	306.3	3.6
170°-180°	103.3	1.2
0°-30°	486.5	5.7
0°-40°	784.1	9.1
0°-60°	1336.1	15.5
0°-90°	1643.0	19.1
90°-120°	3283.2	38.2
90°-150°	6046.7	70.3
90°-180°	6958.0	80.9
0°-180°	8600.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	645	645	645	645	645	
5°	647	639	642	640	639	61
15°	615	608	608	607	606	173
25°	562	553	552	549	551	259
35°	484	477	477	472	474	302
45°	389	385	384	382	382	300
55°	288	288	288	284	284	257
65°	182	188	192	184	178	181
75°	84	92	97	90	82	90
85°	14	19	21	20	19	19
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:

CATALOG NUMBER: SQ4-PW1-150U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	644.9	644.9	644.9	644.9	644.9
2.5°	648.5	643.2	644.9	643.5	640.3
5°	646.6	639.4	641.5	639.8	638.6
7.5°	640.0	633.3	634.9	633.1	632.4
10°	634.1	627.4	629.0	626.7	625.6
12.5°	627.3	620.2	621.7	619.4	618.8
15°	615.3	607.6	608.5	607.4	606.3
17.5°	601.5	593.6	593.8	591.9	591.7
20°	591.5	583.2	582.4	580.1	581.3
22.5°	580.6	571.8	571.0	567.9	569.4
25°	562.5	553.1	552.3	548.9	550.6
27.5°	541.6	532.3	532.3	527.5	529.3
30°	526.1	517.3	518.2	512.6	514.8
32.5°	509.8	501.8	502.3	496.6	498.9
35°	483.5	476.9	476.7	472.2	473.9
37.5°	456.7	450.8	449.9	447.3	447.7
40°	438.1	433.1	431.3	429.6	429.6
42.5°	418.5	414.0	412.2	410.9	410.5
45°	388.6	385.3	383.5	382.4	381.8
47.5°	359.1	356.0	354.4	353.6	353.1
50°	338.6	336.4	335.8	334.1	333.5
52.5°	318.2	316.9	316.3	314.1	313.5
55°	288.1	287.5	288.1	284.1	283.5
57.5°	256.7	257.6	259.4	254.1	252.7
60°	235.8	238.0	240.3	234.0	231.8
62.5°	214.4	218.0	221.3	214.0	210.9
65°	182.4	187.9	191.5	184.0	177.8
67.5°	151.5	158.4	162.6	154.5	147.6
70°	130.1	137.9	142.6	134.5	126.7
72.5°	111.5	120.1	124.0	116.3	108.5
75°	84.1	91.9	96.6	90.2	81.8
77.5°	59.7	67.0	70.9	65.3	58.4
80°	43.8	51.5	54.5	49.9	44.3
82.5°	31.0	37.5	39.5	36.7	33.0
85°	14.2	18.6	21.0	19.9	18.8
87.5°	4.1	8.1	11.7	11.9	12.1
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:

CATALOG NUMBER: SQ4-PW1-150U-075D-927-1D-UNV-STD-W-6

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)