

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-WB-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-WB-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

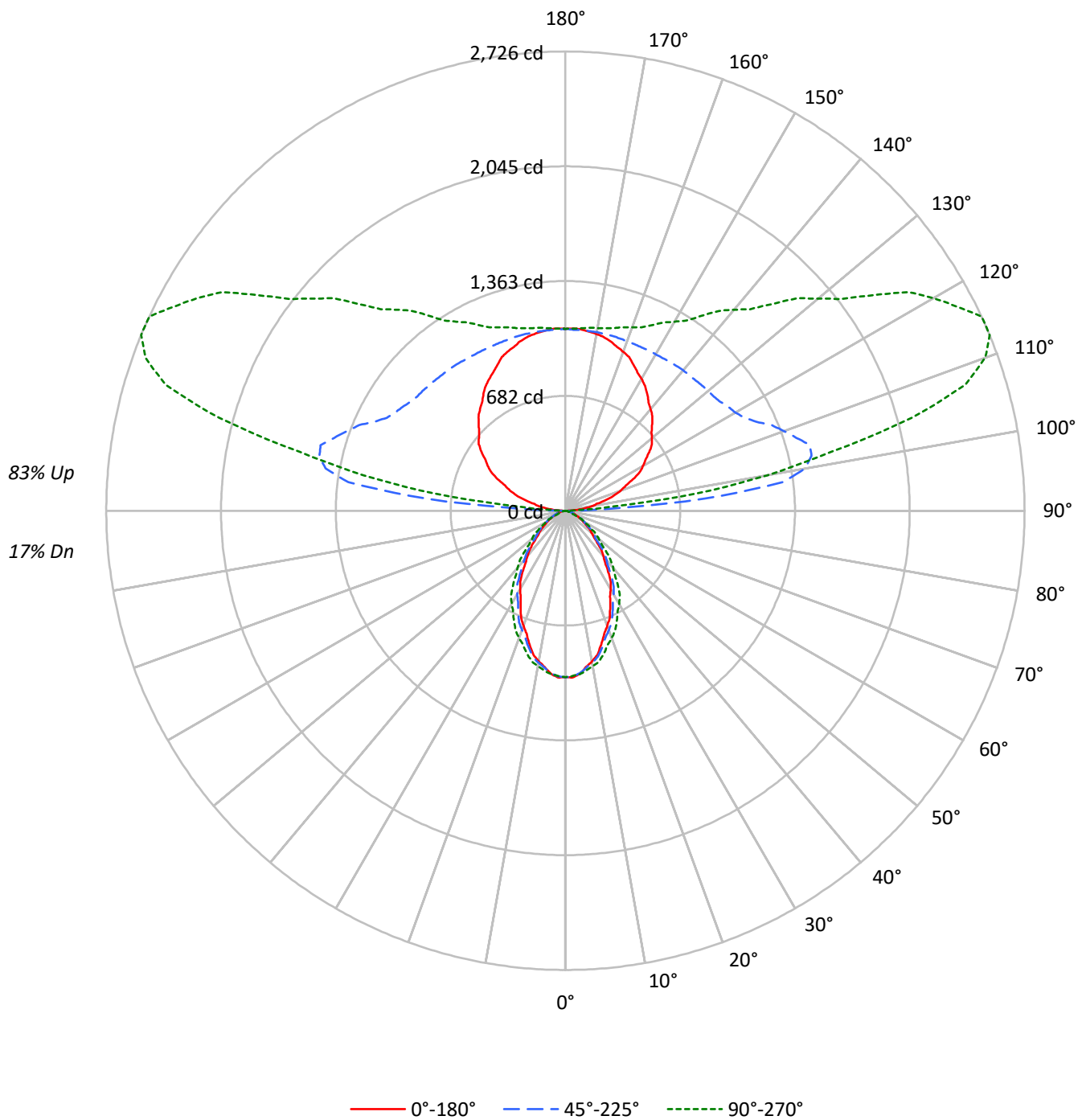
Lumens per Lamp: N/A
Luminaire Lumens: 8400.4 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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

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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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26
1	91	87	83	80	80	77	74	71	57	56	54	40	39	38	23	23	23
2	83	76	71	66	73	67	63	59	51	48	45	35	34	32	21	20	20
3	76	67	61	55	67	60	54	50	45	41	38	32	29	28	19	18	17
4	70	60	52	47	61	53	47	42	40	36	33	28	26	24	17	16	15
5	64	53	46	40	56	47	41	36	36	32	28	26	23	21	16	14	13
6	59	48	40	35	52	42	36	32	32	28	25	23	20	18	14	13	12
7	54	43	36	31	48	38	32	28	29	25	22	21	18	16	13	12	11
8	50	39	32	27	44	35	29	24	27	22	19	19	17	15	12	11	10
9	47	35	29	24	41	32	26	22	25	20	17	18	15	13	11	10	9
10	44	32	26	21	38	29	23	19	23	18	16	16	14	12	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6081	6081	6081
5°	6005	5984	6018
10°	5673	5725	5857
15°	5237	5358	5599
20°	4756	4935	5261
25°	4265	4498	4901
30°	3814	4064	4529
35°	3335	3576	4088
40°	2807	3030	3539
45°	2316	2516	2954
50°	1934	2109	2461
55°	1642	1809	2033
60°	1404	1568	1623
65°	1118	1320	1048
70°	991	1030	640
75°	917	834	392
80°	847	769	337
85°	762	706	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2954 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.7	1.1
10°-20°	235.9	2.8
20°-30°	305.5	3.6
30°-40°	299.2	3.6
40°-50°	229.0	2.7
50°-60°	152.6	1.8
60°-70°	83.3	1.0
70°-80°	34.7	0.4
80°-90°	12.1	0.1
90°-100°	501.5	6.0
100°-110°	1356.0	16.1
110°-120°	1425.6	17.0
120°-130°	1158.0	13.8
130°-140°	908.4	10.8
140°-150°	697.2	8.3
150°-160°	501.4	6.0
160°-170°	306.3	3.6
170°-180°	103.3	1.2
0°-30°	632.0	7.5
0°-40°	931.2	11.1
0°-60°	1312.7	15.6
0°-90°	1442.8	17.2
90°-120°	3283.2	39.1
90°-150°	6046.7	72.0
90°-180°	6958.0	82.8
0°-180°	8400.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	989	989	989	989	989	
5°	972	963	969	971	975	90
15°	822	820	842	864	879	230
25°	628	630	663	692	722	289
35°	444	446	476	508	544	276
45°	266	271	289	311	340	208
55°	153	160	169	175	190	139
65°	77	83	91	79	72	80
75°	39	39	35	24	16	41
85°	11	11	10	6	4	12
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°	988.6	988.6	988.6	988.6	988.6
2.5°	991.0	982.2	984.4	984.4	981.6
5°	972.5	962.8	969.1	971.3	974.7
7.5°	936.4	929.1	940.5	949.0	955.9
10°	908.3	902.0	916.6	928.9	937.8
12.5°	875.7	870.4	888.5	905.0	916.7
15°	822.4	819.5	841.5	864.4	879.3
17.5°	765.4	764.0	789.3	816.0	835.0
20°	726.6	726.2	753.9	781.7	803.8
22.5°	687.4	688.3	717.5	746.4	771.5
25°	628.5	630.2	662.8	691.7	722.2
27.5°	574.1	574.9	608.6	639.1	671.7
30°	537.0	539.1	572.2	603.7	637.7
32.5°	499.9	502.3	534.7	567.3	601.9
35°	444.2	446.3	476.3	508.3	544.4
37.5°	386.8	389.6	416.3	446.6	482.0
40°	349.6	353.9	377.4	405.9	440.7
42.5°	313.9	319.1	340.9	368.0	399.4
45°	266.3	271.4	289.3	311.2	339.6
47.5°	225.4	231.2	245.0	263.9	288.1
50°	202.1	207.7	220.4	234.3	257.2
52.5°	181.7	187.2	198.5	209.3	228.8
55°	153.1	159.5	168.7	175.1	189.6
57.5°	129.7	135.8	143.1	146.0	154.8
60°	114.1	120.9	127.5	127.2	131.9
62.5°	99.9	105.6	112.3	107.7	107.9
65°	76.8	83.1	90.7	79.2	72.0
67.5°	62.0	63.4	71.1	55.2	46.7
70°	55.1	55.1	57.3	42.8	35.6
72.5°	48.5	48.5	46.5	34.8	27.2
75°	38.6	38.6	35.1	24.1	16.5
77.5°	29.8	29.4	26.9	18.0	12.0
80°	23.9	23.9	21.7	14.2	9.5
82.5°	18.7	18.7	16.8	11.1	7.1
85°	10.8	10.8	10.0	6.4	3.9
87.5°	4.3	5.2	6.5	5.3	4.8
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)