

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-4

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-4
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

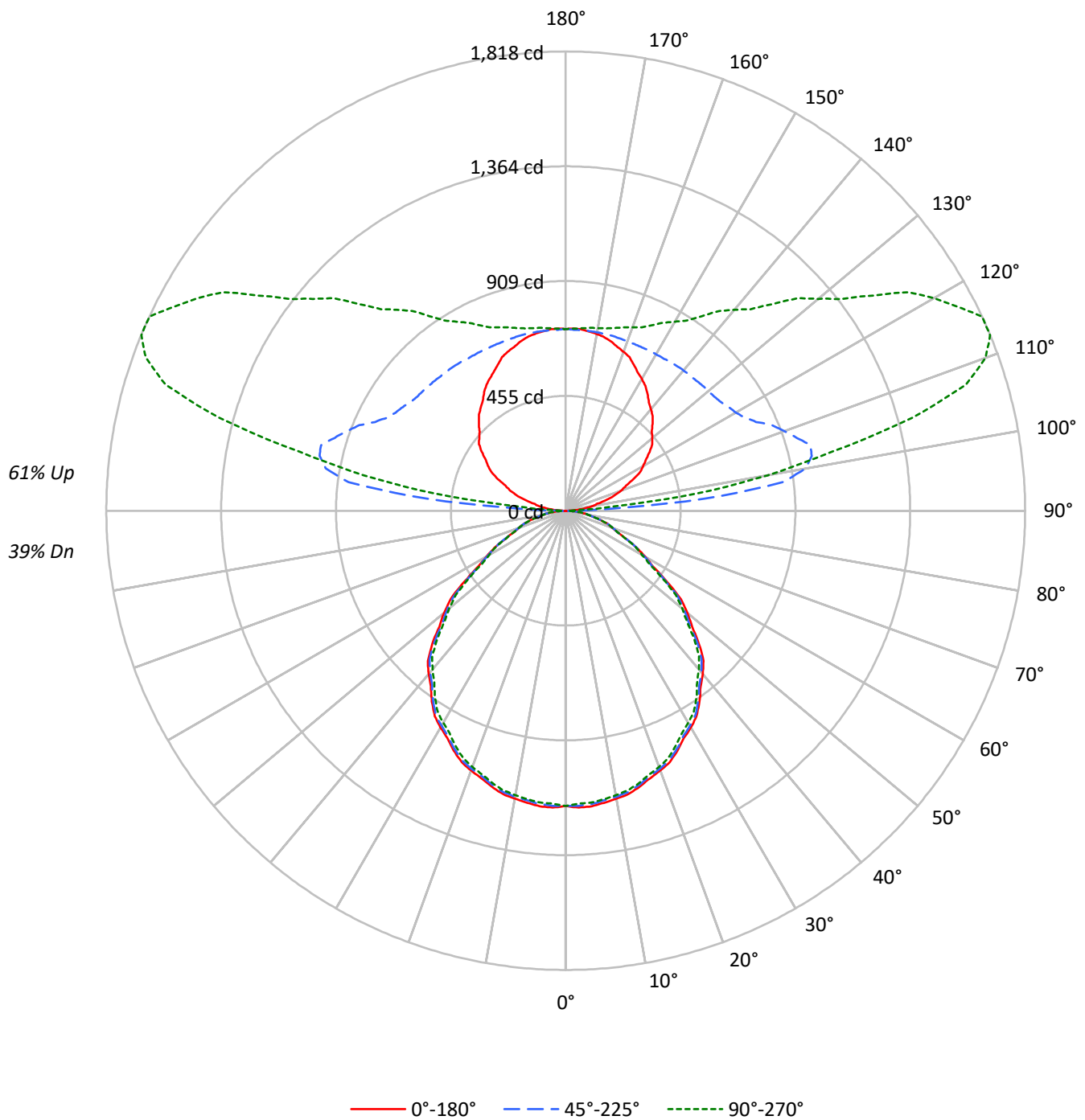
Lumens per Lamp: N/A
Luminaire Lumens: 7561.9 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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:

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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33
3	80	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14
10	46	34	27	22	42	31	25	21	26	21	18	21	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10785	10785	10785
5°	10881	10797	10741
10°	10847	10771	10715
15°	10799	10732	10674
20°	10745	10675	10597
25°	10669	10597	10474
30°	10554	10479	10329
35°	10398	10308	10160
40°	10161	10052	9870
45°	9747	9576	9379
50°	9017	8800	8626
55°	7871	7692	7530
60°	6632	6576	6445
65°	5737	5759	5715
70°	5268	5295	5295
75°	5062	5062	5098
80°	4761	4814	4761
85°	3832	4266	4266

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9747 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	1.5
10°-20°	316.2	4.2
20°-30°	477.0	6.3
30°-40°	568.3	7.5
40°-50°	560.3	7.4
50°-60°	428.2	5.7
60°-70°	265.0	3.5
70°-80°	150.5	2.0
80°-90°	47.3	0.6
90°-100°	334.3	4.4
100°-110°	904.0	12.0
110°-120°	950.4	12.6
120°-130°	772.0	10.2
130°-140°	605.6	8.0
140°-150°	464.8	6.1
150°-160°	334.3	4.4
160°-170°	204.2	2.7
170°-180°	68.8	0.9
0°-30°	903.8	12.0
0°-40°	1472.1	19.5
0°-60°	2460.7	32.5
0°-90°	2923.5	38.7
90°-120°	2188.8	28.9
90°-150°	4031.1	53.3
90°-180°	4638.0	61.3
0°-180°	7561.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1175	1162	1166	1162	1160	111
15°	1131	1119	1124	1120	1118	319
25°	1048	1035	1041	1030	1029	482
35°	923	912	915	903	902	576
45°	747	737	734	721	719	572
55°	489	481	478	470	468	438
65°	263	261	264	262	262	266
75°	142	142	142	143	143	150
85°	36	38	40	40	40	42
90°	2	5	10	11	10	5
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-100D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.9	1168.9	1168.9	1168.9	1168.9
2.5°	1176.1	1165.9	1168.9	1166.3	1160.8
5°	1174.9	1162.1	1165.8	1161.8	1159.8
7.5°	1165.8	1153.2	1157.0	1152.9	1151.7
10°	1157.8	1146.0	1149.7	1145.7	1143.7
12.5°	1148.9	1136.3	1140.9	1136.0	1134.0
15°	1130.6	1118.8	1123.6	1119.5	1117.5
17.5°	1110.5	1097.9	1102.6	1097.9	1095.4
20°	1094.4	1082.5	1087.3	1080.2	1079.3
22.5°	1076.6	1064.8	1069.6	1060.1	1059.9
25°	1048.0	1035.2	1041.0	1029.9	1028.9
27.5°	1014.0	1002.2	1007.0	995.7	994.5
30°	990.7	978.8	983.6	971.5	969.5
32.5°	964.1	953.1	957.0	944.9	943.7
35°	923.2	912.4	915.2	903.0	902.1
37.5°	876.7	866.8	868.4	855.1	854.1
40°	843.7	833.8	834.6	820.5	819.5
42.5°	807.4	797.6	796.8	782.6	781.7
45°	747.0	737.2	733.9	720.8	718.8
47.5°	678.2	668.3	662.3	651.5	650.2
50°	628.2	618.4	613.1	604.0	601.0
52.5°	574.3	564.4	560.0	551.6	548.7
55°	489.3	481.4	478.2	470.1	468.1
57.5°	408.5	403.2	402.3	394.4	393.6
60°	359.4	356.5	356.4	349.3	349.3
62.5°	317.5	315.4	316.9	312.3	311.5
65°	262.8	260.8	263.8	261.8	261.8
67.5°	219.5	219.5	221.3	220.5	220.5
70°	195.3	195.3	196.3	196.3	196.3
72.5°	173.6	172.8	175.4	175.4	174.6
75°	142.0	142.0	142.0	143.0	143.0
77.5°	110.5	110.7	111.5	111.3	110.5
80°	89.6	90.6	90.6	89.6	89.6
82.5°	68.7	69.6	69.7	69.4	68.7
85°	36.2	38.2	40.3	40.3	40.3
87.5°	10.8	14.5	18.1	18.3	17.3
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-150U-100D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)