

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-PR1-100U-125D-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 (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

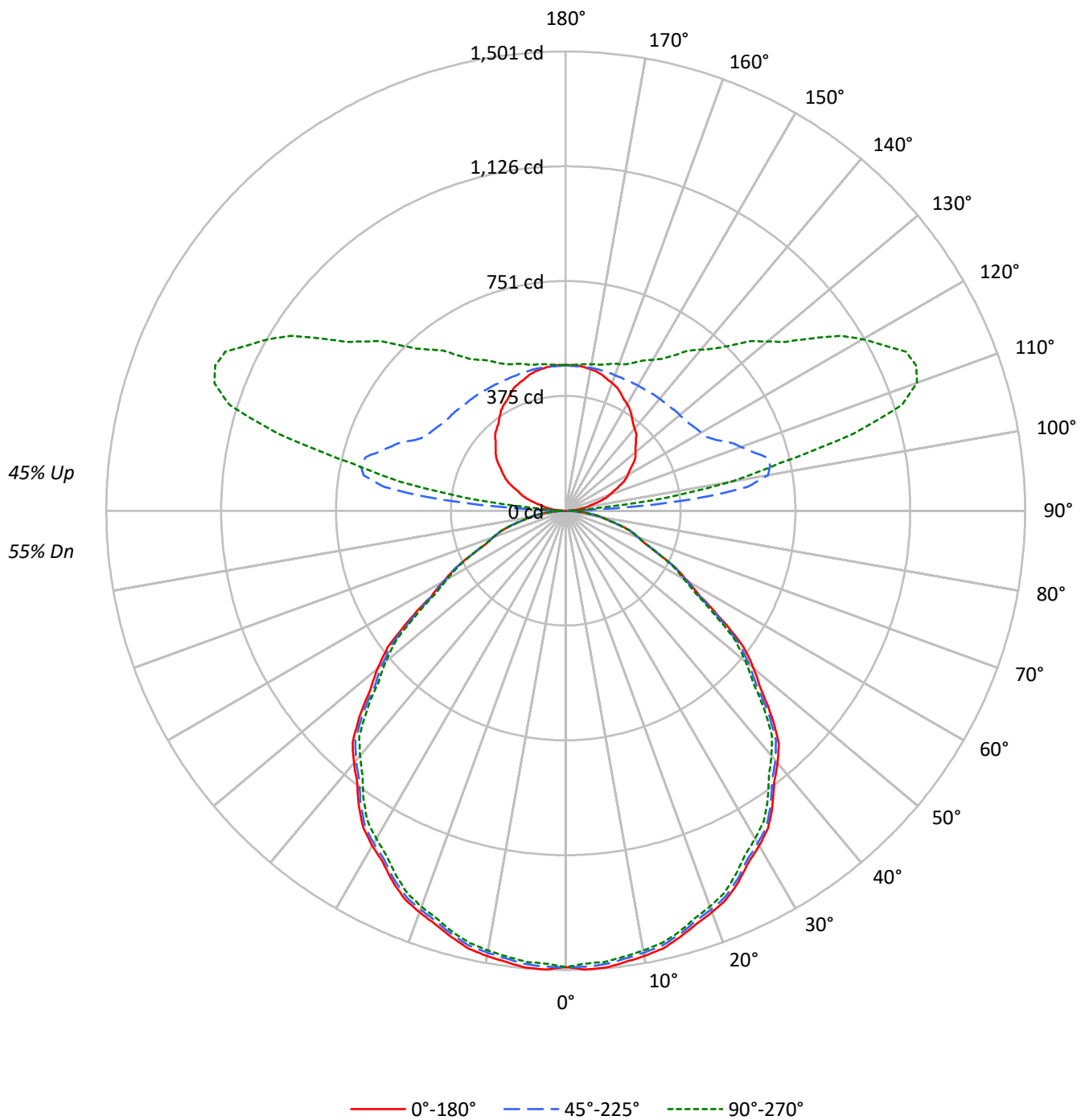
Lumens per Lamp: N/A
Luminaire Lumens: 6822.4 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	53	52
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44
3	83	73	66	60	77	69	62	57	59	54	50	51	47	44	43	40	38
4	76	65	57	51	70	61	54	49	53	47	43	45	41	38	38	35	33
5	70	58	50	44	65	54	47	42	47	42	37	41	36	33	35	31	29
6	64	52	44	38	60	49	42	37	43	37	33	37	32	29	31	28	25
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	25	23
8	55	43	35	30	51	40	33	29	35	30	26	31	26	23	26	23	20
9	51	39	32	27	48	37	30	26	33	27	23	28	24	21	24	21	18
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13762	13762	13762
5°	13886	13779	13708
10°	13842	13746	13673
15°	13781	13695	13622
20°	13711	13623	13523
25°	13615	13523	13366
30°	13468	13372	13181
35°	13269	13154	12966
40°	12967	12828	12596
45°	12438	12221	11969
50°	11507	11230	11009
55°	10044	9817	9609
60°	8464	8392	8226
65°	7320	7348	7292
70°	6722	6757	6757
75°	6459	6459	6502
80°	6073	6142	6073
85°	4901	5441	5441

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12438 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	2.1
10°-20°	403.6	5.9
20°-30°	608.7	8.9
30°-40°	725.3	10.6
40°-50°	715.1	10.5
50°-60°	546.5	8.0
60°-70°	338.2	5.0
70°-80°	192.1	2.8
80°-90°	59.4	0.9
90°-100°	222.9	3.3
100°-110°	615.3	9.0
110°-120°	634.6	9.3
120°-130°	510.0	7.5
130°-140°	400.8	5.9
140°-150°	307.4	4.5
150°-160°	220.9	3.2
160°-170°	135.1	2.0
170°-180°	45.5	0.7
0°-30°	1153.3	16.9
0°-40°	1878.6	27.5
0°-60°	3140.2	46.0
0°-90°	3729.9	54.7
90°-120°	1472.8	21.6
90°-150°	2691.0	39.4
90°-180°	3093.0	45.3
0°-180°	6822.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1492	1492	1492	1492	1492	
5°	1499	1483	1488	1483	1480	142
15°	1443	1428	1434	1429	1426	407
25°	1337	1321	1328	1314	1313	615
35°	1178	1164	1168	1152	1151	735
45°	953	941	937	920	917	730
55°	624	614	610	600	597	559
65°	335	333	337	334	334	340
75°	181	181	181	182	182	191
85°	46	49	51	51	51	54
90°	2	3	6	7	8	4
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1491.6	1491.6	1491.6	1491.6	1491.6
2.5°	1500.9	1487.8	1491.6	1488.4	1481.3
5°	1499.3	1483.0	1487.8	1482.6	1480.1
7.5°	1487.8	1471.7	1476.5	1471.3	1469.8
10°	1477.5	1462.4	1467.2	1462.0	1459.5
12.5°	1466.2	1450.1	1455.9	1449.7	1447.2
15°	1442.8	1427.7	1433.8	1428.6	1426.1
17.5°	1417.1	1401.0	1407.1	1401.1	1397.8
20°	1396.5	1381.5	1387.5	1378.5	1377.3
22.5°	1373.9	1358.9	1364.9	1352.9	1352.6
25°	1337.4	1321.1	1328.4	1314.3	1313.0
27.5°	1294.0	1278.9	1285.0	1270.6	1269.1
30°	1264.2	1249.1	1255.2	1239.7	1237.2
32.5°	1230.3	1216.2	1221.3	1205.8	1204.3
35°	1178.1	1164.3	1167.9	1152.4	1151.2
37.5°	1118.8	1106.2	1108.2	1091.3	1090.0
40°	1076.6	1064.1	1065.1	1047.1	1045.8
42.5°	1030.4	1017.8	1016.8	998.7	997.5
45°	953.3	940.7	936.6	919.8	917.3
47.5°	865.4	852.9	845.1	831.5	829.7
50°	801.7	789.1	782.4	770.8	767.0
52.5°	732.8	720.3	714.6	704.0	700.2
55°	624.4	614.3	610.3	599.9	597.4
57.5°	521.4	514.6	513.4	503.3	502.3
60°	458.7	454.9	454.8	445.8	445.8
62.5°	405.2	402.5	404.4	398.5	397.5
65°	335.3	332.8	336.6	334.0	334.0
67.5°	280.1	280.1	282.4	281.4	281.4
70°	249.2	249.2	250.5	250.5	250.5
72.5°	221.5	220.5	223.8	223.8	222.8
75°	181.2	181.2	181.2	182.4	182.4
77.5°	141.1	141.3	142.4	142.1	141.1
80°	114.3	115.6	115.6	114.3	114.3
82.5°	87.6	88.9	88.9	88.6	87.6
85°	46.3	48.8	51.4	51.4	51.4
87.5°	13.7	18.0	21.8	21.9	21.1
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)