

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-PR1-125U-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 (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

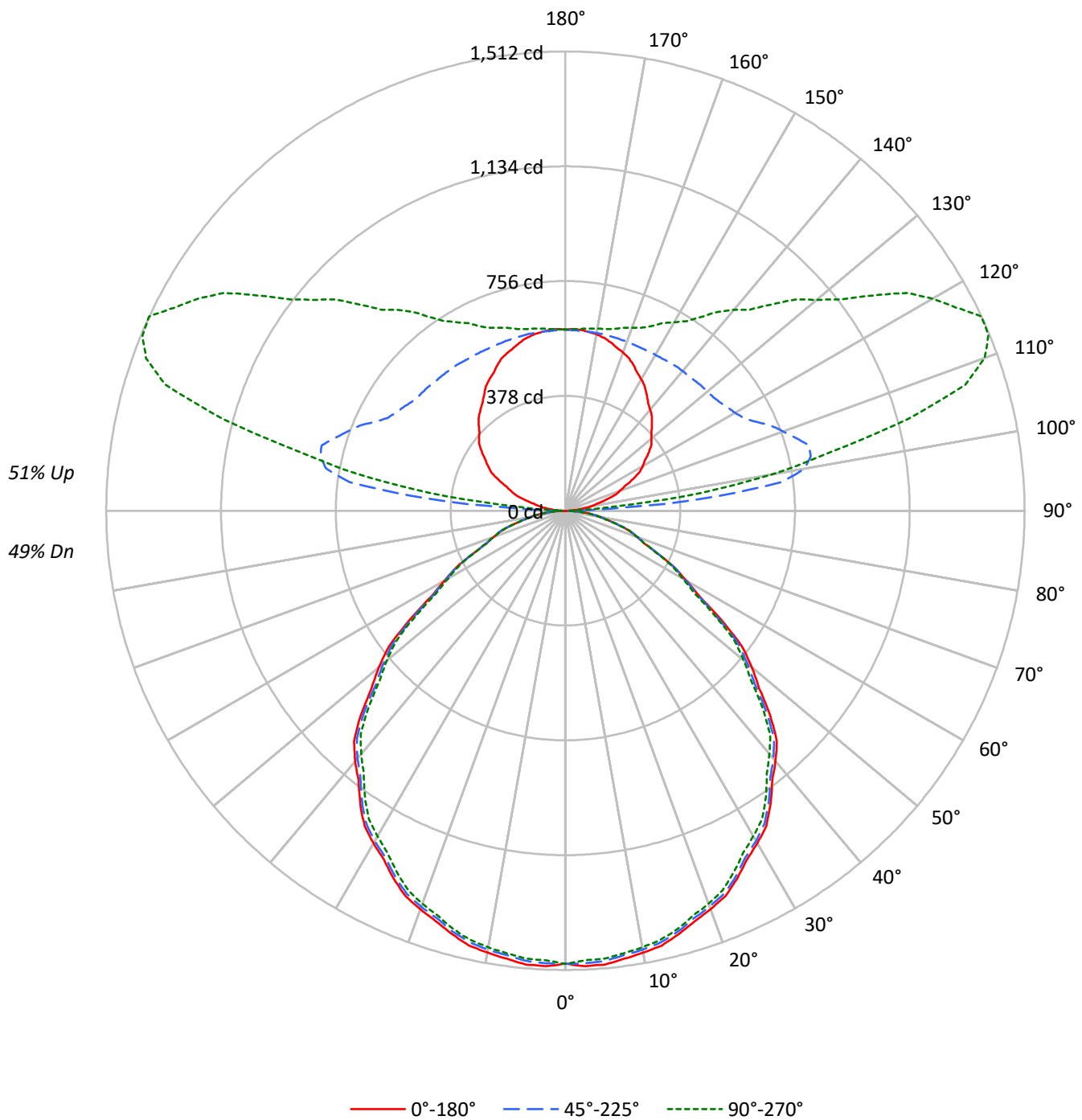
Lumens per Lamp: N/A
Luminaire Lumens: 7579.7 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 75.3
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

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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	49	48	47
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35
4	75	64	56	51	69	60	53	47	51	46	41	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26
6	63	51	43	38	58	48	41	36	41	36	31	35	30	27	29	26	23
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17
10	47	35	28	23	44	33	27	22	29	23	20	25	20	18	21	18	15

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	1.9
10°-20°	403.6	5.3
20°-30°	608.7	8.0
30°-40°	725.3	9.6
40°-50°	715.1	9.4
50°-60°	546.5	7.2
60°-70°	338.2	4.5
70°-80°	192.1	2.5
80°-90°	59.8	0.8
90°-100°	278.9	3.7
100°-110°	751.4	9.9
110°-120°	788.6	10.4
120°-130°	639.9	8.4
130°-140°	501.9	6.6
140°-150°	385.3	5.1
150°-160°	277.0	3.7
160°-170°	169.3	2.2
170°-180°	57.1	0.8
0°-30°	1153.3	15.2
0°-40°	1878.6	24.8
0°-60°	3140.2	41.4
0°-90°	3730.3	49.2
90°-120°	1819.0	24.0
90°-150°	3346.1	44.1
90°-180°	3849.0	50.8
0°-180°	7579.7	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	4	9	10	10	5
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-4

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	18.3	22.4	22.5	21.5
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)