

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-PR1-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

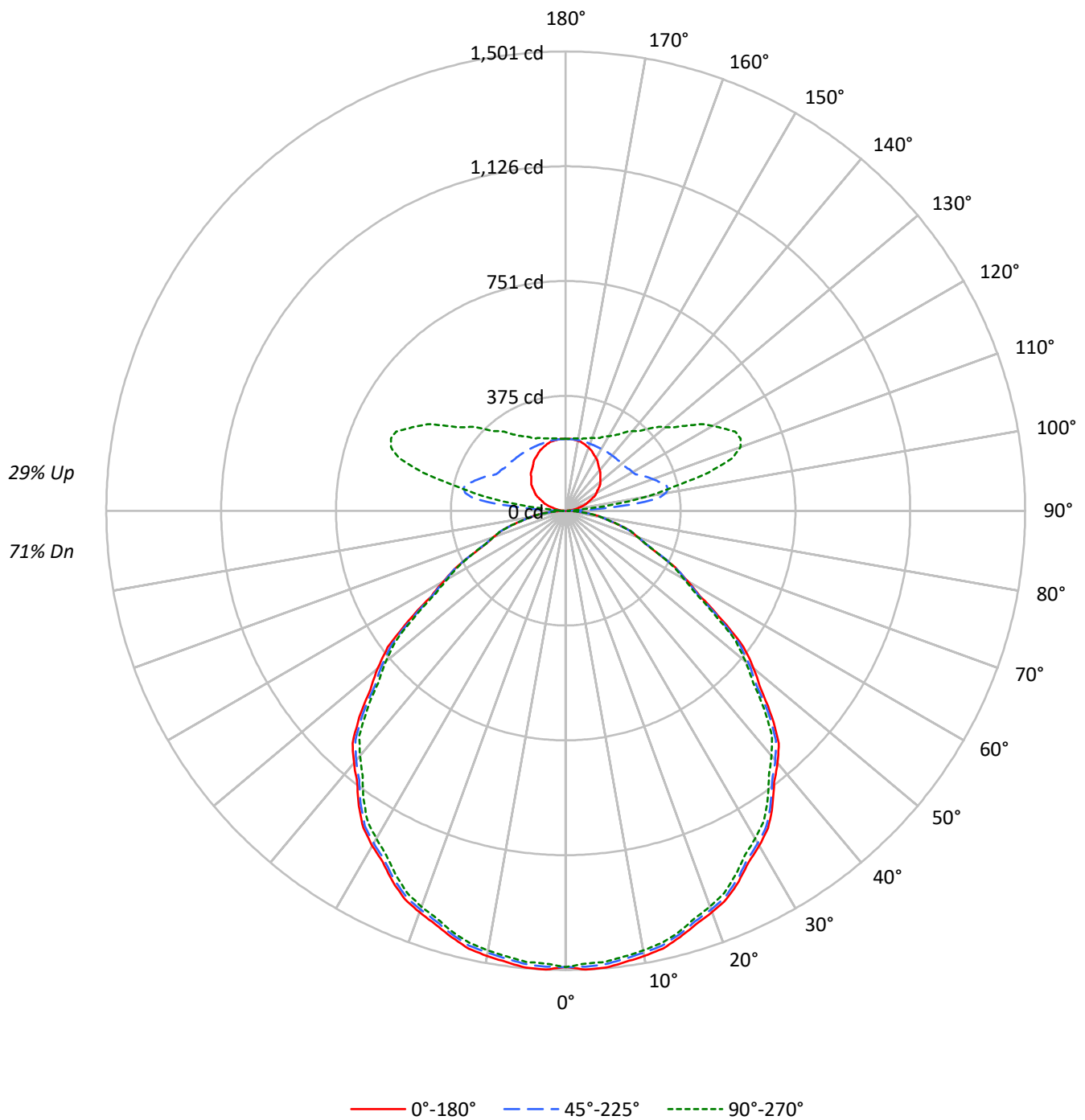
Lumens per Lamp: N/A
Luminaire Lumens: 5263.6 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64
2	94	87	80	75	89	82	77	72	74	70	66	67	63	60	60	57	55
3	86	77	69	63	81	73	66	61	66	60	56	59	55	52	53	50	47
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36
6	67	55	47	41	63	52	45	39	48	41	37	43	38	34	39	35	32
7	62	50	42	36	59	48	40	35	43	37	33	40	34	30	36	32	28
8	58	45	37	32	55	43	36	31	40	34	29	36	31	27	33	29	25
9	54	41	34	29	51	40	33	28	37	30	26	33	28	25	31	26	23
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21

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	2.7
10°-20°	403.6	7.7
20°-30°	608.7	11.6
30°-40°	725.3	13.8
40°-50°	715.1	13.6
50°-60°	546.5	10.4
60°-70°	338.2	6.4
70°-80°	192.1	3.6
80°-90°	59.3	1.1
90°-100°	112.8	2.1
100°-110°	306.3	5.8
110°-120°	315.0	6.0
120°-130°	251.8	4.8
130°-140°	197.9	3.8
140°-150°	151.7	2.9
150°-160°	109.1	2.1
160°-170°	66.7	1.3
170°-180°	22.5	0.4
0°-30°	1153.3	21.9
0°-40°	1878.6	35.7
0°-60°	3140.2	59.7
0°-90°	3729.8	70.9
90°-120°	734.1	13.9
90°-150°	1335.5	25.4
90°-180°	1534.0	29.1
0°-180°	5263.6	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°	1	3	5	7	7	3
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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°	13.5	18.0	21.6	21.9	20.9
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)