

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-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

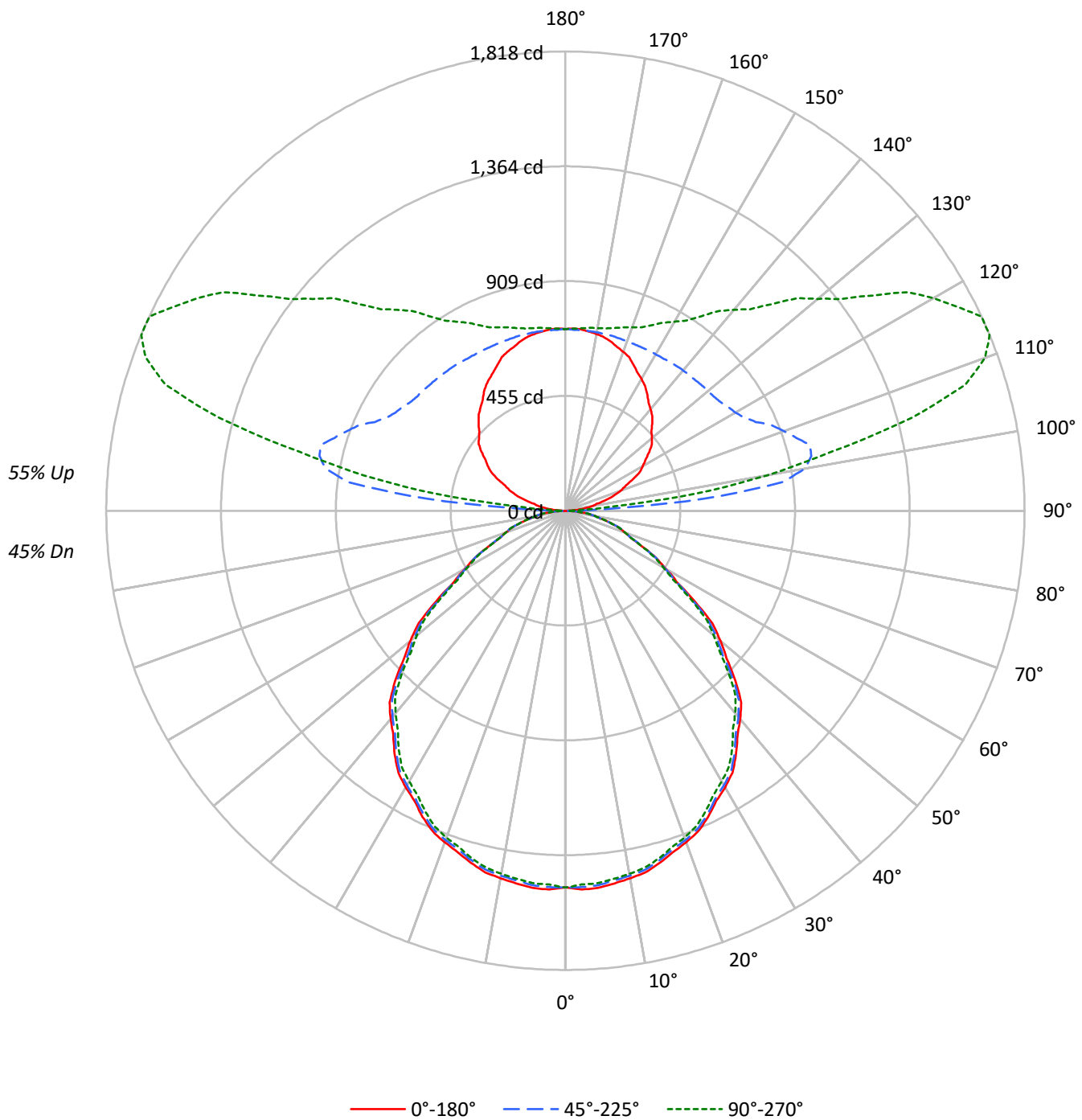
Lumens per Lamp: N/A
Luminaire Lumens: 8368.8 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	97	93	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44
2	88	81	75	70	81	75	69	65	62	59	55	51	48	46	40	39	37
3	81	72	64	59	74	66	60	55	55	51	47	45	42	39	36	34	32
4	74	63	56	50	68	58	52	47	49	44	40	40	37	34	32	30	28
5	68	57	49	43	62	52	45	40	44	39	35	36	32	29	29	26	24
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	21
7	58	46	38	33	53	42	35	31	36	31	27	30	26	23	24	21	19
8	54	42	34	29	49	39	32	27	33	27	24	27	23	20	22	19	17
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	15
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14

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	1.7
10°-20°	403.6	4.8
20°-30°	608.7	7.3
30°-40°	725.3	8.7
40°-50°	715.1	8.5
50°-60°	546.5	6.5
60°-70°	338.2	4.0
70°-80°	192.1	2.3
80°-90°	59.9	0.7
90°-100°	334.3	4.0
100°-110°	904.0	10.8
110°-120°	950.4	11.4
120°-130°	772.0	9.2
130°-140°	605.6	7.2
140°-150°	464.8	5.6
150°-160°	334.3	4.0
160°-170°	204.2	2.4
170°-180°	68.8	0.8
0°-30°	1153.3	13.8
0°-40°	1878.6	22.4
0°-60°	3140.2	37.5
0°-90°	3730.4	44.6
90°-120°	2188.8	26.2
90°-150°	4031.1	48.2
90°-180°	4638.0	55.4
0°-180°	8368.8	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	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:

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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	18.3	22.6	22.7	21.5
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

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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)