

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-F-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, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

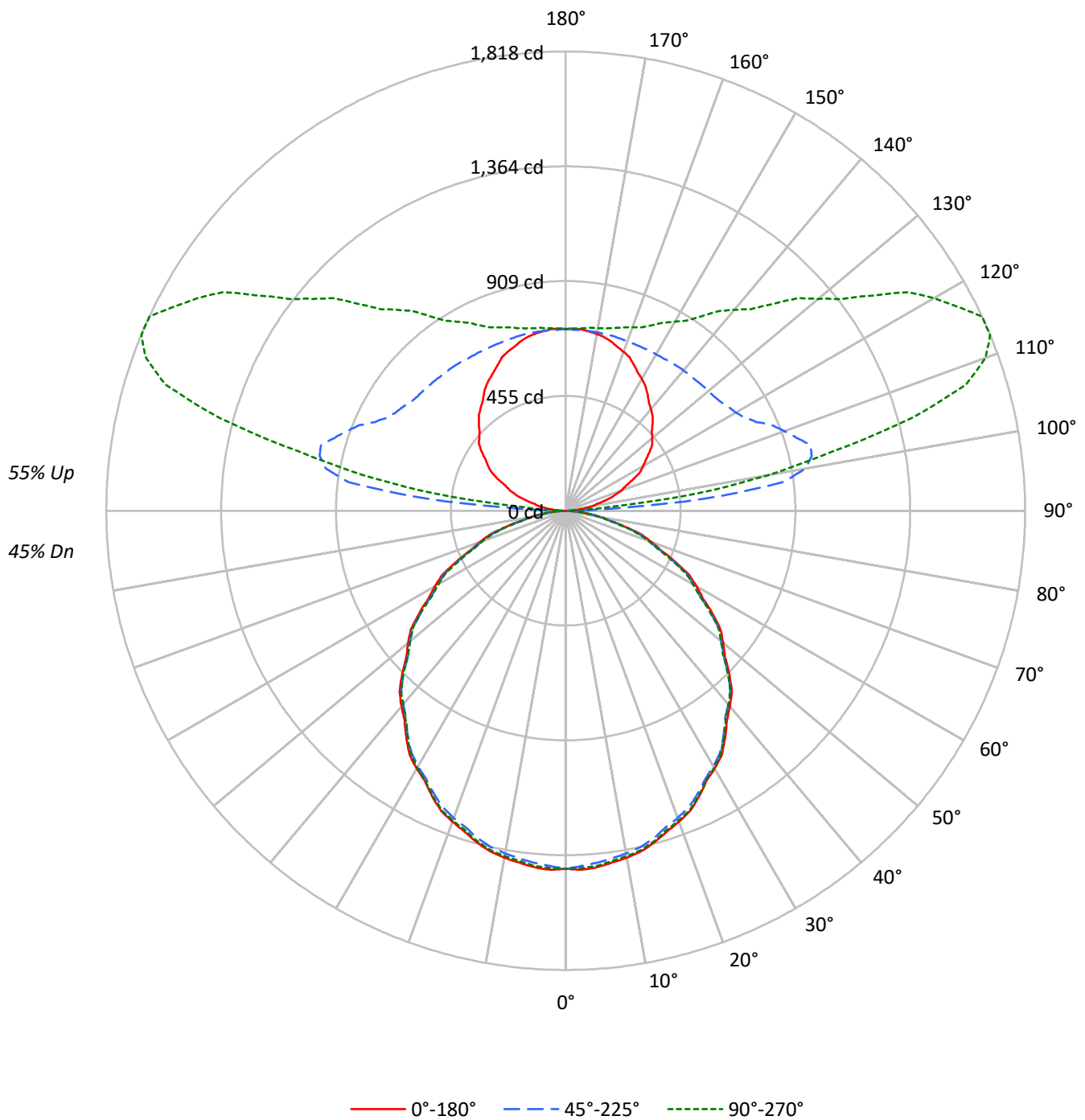
Lumens per Lamp: N/A
Luminaire Lumens: 8508.9 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	81	81	81	66	66	66	52	52	52
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13084	13084	13084
5°	13126	12960	13069
10°	13066	12905	13007
15°	12979	12822	12926
20°	12858	12713	12812
25°	12712	12577	12680
30°	12555	12446	12514
35°	12377	12271	12280
40°	12173	12042	12079
45°	11945	11812	11833
50°	11684	11549	11516
55°	11387	11223	11199
60°	11016	10773	10715
65°	10444	10223	10086
70°	9727	9474	9347
75°	8652	8459	8206
80°	7051	6843	6801
85°	4213	4795	4795

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11945 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	1.6
10°-20°	381.1	4.5
20°-30°	572.5	6.7
30°-40°	683.1	8.0
40°-50°	700.2	8.2
50°-60°	624.1	7.3
60°-70°	464.6	5.5
70°-80°	251.7	3.0
80°-90°	59.3	0.7
90°-100°	334.3	3.9
100°-110°	904.0	10.6
110°-120°	950.4	11.2
120°-130°	772.0	9.1
130°-140°	605.6	7.1
140°-150°	464.8	5.5
150°-160°	334.3	3.9
160°-170°	204.2	2.4
170°-180°	68.8	0.8
0°-30°	1087.4	12.8
0°-40°	1770.5	20.8
0°-60°	3094.8	36.4
0°-90°	3870.4	45.5
90°-120°	2188.8	25.7
90°-150°	4031.1	47.4
90°-180°	4638.0	54.5
0°-180°	8508.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1417	1415	1399	1412	1411	134
15°	1359	1356	1342	1354	1353	383
25°	1249	1246	1236	1243	1246	575
35°	1099	1098	1090	1090	1090	687
45°	916	913	905	904	907	705
55°	708	706	698	692	696	632
65°	478	475	468	465	462	474
75°	243	243	237	232	230	258
85°	40	45	45	46	45	55
90°	2	5	10	11	10	4
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°	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1422.5	1420.0	1407.5	1418.0	1416.2
5°	1417.3	1415.0	1399.4	1411.8	1411.1
7.5°	1405.3	1402.4	1388.1	1399.8	1398.4
10°	1394.7	1392.4	1377.5	1389.2	1388.4
12.5°	1381.6	1379.3	1364.4	1376.1	1375.9
15°	1358.8	1355.7	1342.4	1354.1	1353.3
17.5°	1331.5	1327.9	1314.8	1324.0	1325.5
20°	1309.6	1307.3	1294.8	1303.4	1304.9
22.5°	1287.1	1284.2	1271.0	1280.9	1282.4
25°	1248.7	1246.4	1235.5	1242.6	1245.6
27.5°	1206.6	1206.6	1196.4	1201.5	1203.3
30°	1178.5	1178.5	1168.3	1171.5	1174.6
32.5°	1148.5	1146.1	1136.5	1139.1	1142.1
35°	1098.9	1098.1	1089.5	1089.5	1090.3
37.5°	1047.5	1045.4	1036.0	1036.7	1040.3
40°	1010.7	1009.2	999.8	999.8	1002.9
42.5°	973.2	971.7	963.5	962.3	963.5
45°	915.5	913.2	905.3	903.8	906.9
47.5°	854.0	854.6	845.2	843.1	844.8
50°	814.0	814.0	804.6	800.0	802.3
52.5°	772.2	771.0	761.6	756.4	761.7
55°	707.9	705.6	697.7	692.3	696.2
57.5°	642.0	638.5	630.6	624.7	626.9
60°	597.0	591.7	583.8	579.1	580.7
62.5°	550.2	547.3	538.8	531.7	535.1
65°	478.4	475.4	468.3	465.1	462.0
67.5°	408.0	406.0	398.0	394.7	392.7
70°	360.6	356.8	351.2	347.3	346.5
72.5°	314.4	309.9	304.4	301.1	299.1
75°	242.7	242.7	237.3	232.5	230.2
77.5°	174.5	175.1	170.6	169.0	168.0
80°	132.7	132.7	128.8	127.2	128.0
82.5°	92.7	94.5	93.2	91.0	89.9
85°	39.8	45.1	45.3	46.0	45.3
87.5°	7.2	12.1	13.9	12.8	11.4
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)