

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

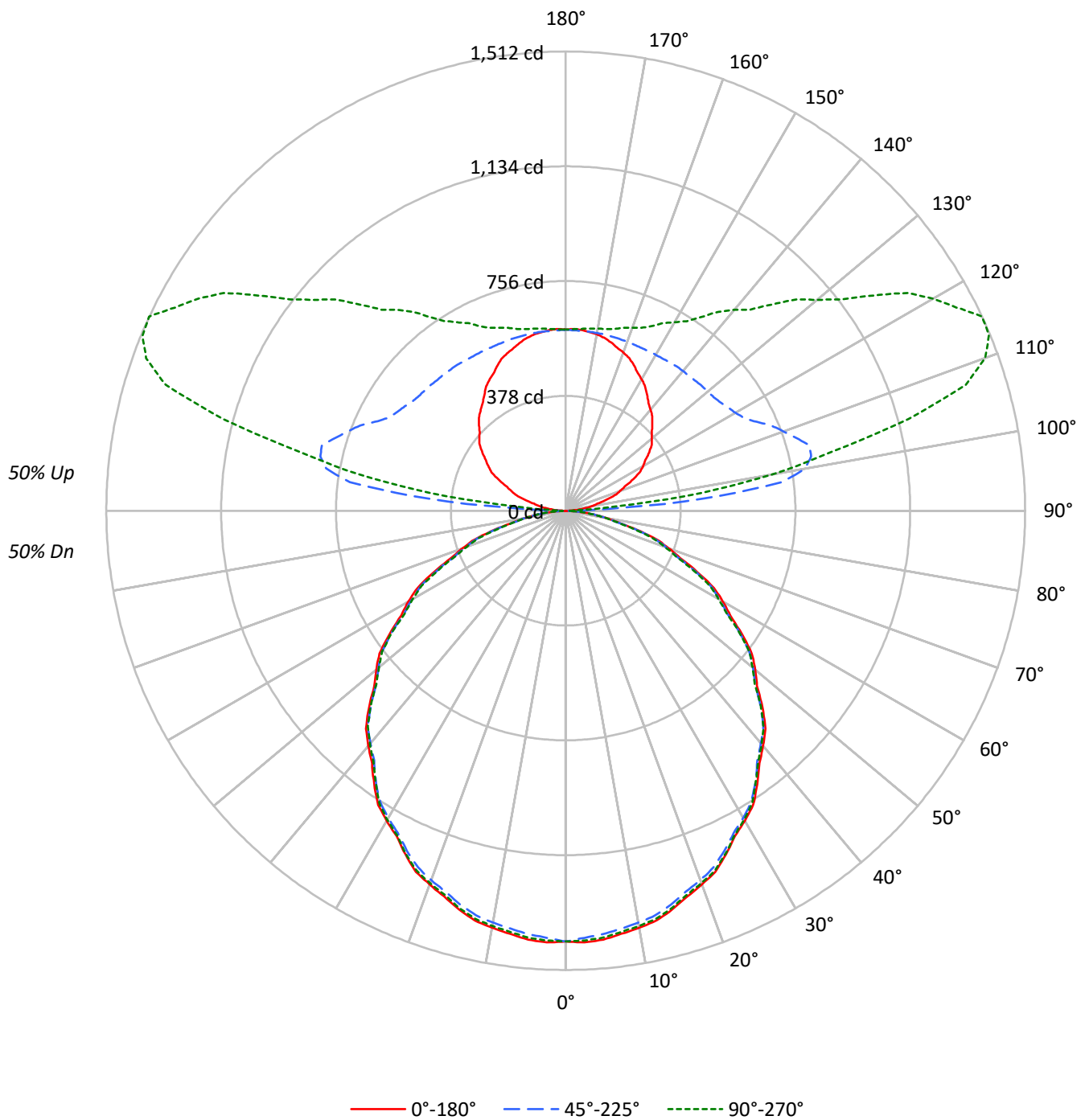
Lumens per Lamp: N/A
Luminaire Lumens: 7719.8 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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	56	56	56
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	50	49	47
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	31	29
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14

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	1.7
10°-20°	381.1	4.9
20°-30°	572.5	7.4
30°-40°	683.1	8.8
40°-50°	700.2	9.1
50°-60°	624.1	8.1
60°-70°	464.6	6.0
70°-80°	251.7	3.3
80°-90°	59.2	0.8
90°-100°	278.9	3.6
100°-110°	751.4	9.7
110°-120°	788.6	10.2
120°-130°	639.9	8.3
130°-140°	501.9	6.5
140°-150°	385.3	5.0
150°-160°	277.0	3.6
160°-170°	169.3	2.2
170°-180°	57.1	0.7
0°-30°	1087.4	14.1
0°-40°	1770.5	22.9
0°-60°	3094.8	40.1
0°-90°	3870.3	50.1
90°-120°	1819.0	23.6
90°-150°	3346.1	43.3
90°-180°	3849.0	49.9
0°-180°	7719.8	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	4	9	10	10	4
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-F-125U-125D-927-1D-UNV-STD-W-4

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	12.0	13.7	12.6	11.3
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)