

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-100U-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 (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

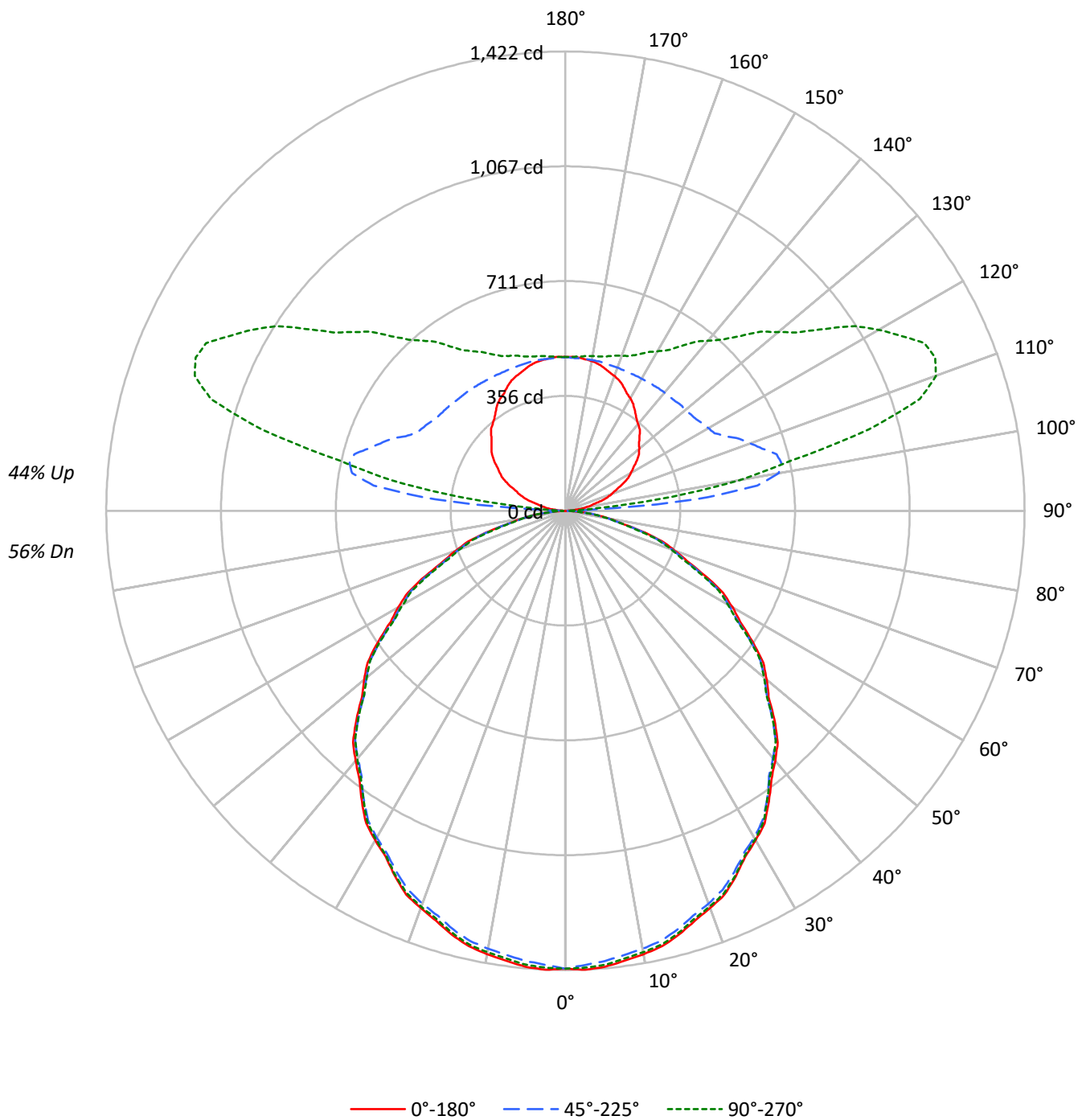
Lumens per Lamp: N/A
Luminaire Lumens: 6962.5 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	50	30	10
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56		
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47		
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39		
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33		
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28		
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24		
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21		
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19		
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17		
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15		
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	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	1.9
10°-20°	381.1	5.5
20°-30°	572.5	8.2
30°-40°	683.1	9.8
40°-50°	700.2	10.1
50°-60°	624.1	9.0
60°-70°	464.6	6.7
70°-80°	251.7	3.6
80°-90°	58.8	0.8
90°-100°	222.9	3.2
100°-110°	615.3	8.8
110°-120°	634.6	9.1
120°-130°	510.0	7.3
130°-140°	400.8	5.8
140°-150°	307.4	4.4
150°-160°	220.9	3.2
160°-170°	135.1	1.9
170°-180°	45.5	0.7
0°-30°	1087.4	15.6
0°-40°	1770.5	25.4
0°-60°	3094.8	44.5
0°-90°	3869.9	55.6
90°-120°	1472.8	21.2
90°-150°	2691.0	38.6
90°-180°	3093.0	44.4
0°-180°	6962.5	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	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

CATALOG NUMBER: SQ4-F-100U-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	11.7	13.1	12.0	10.9
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)