

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-100D-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, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

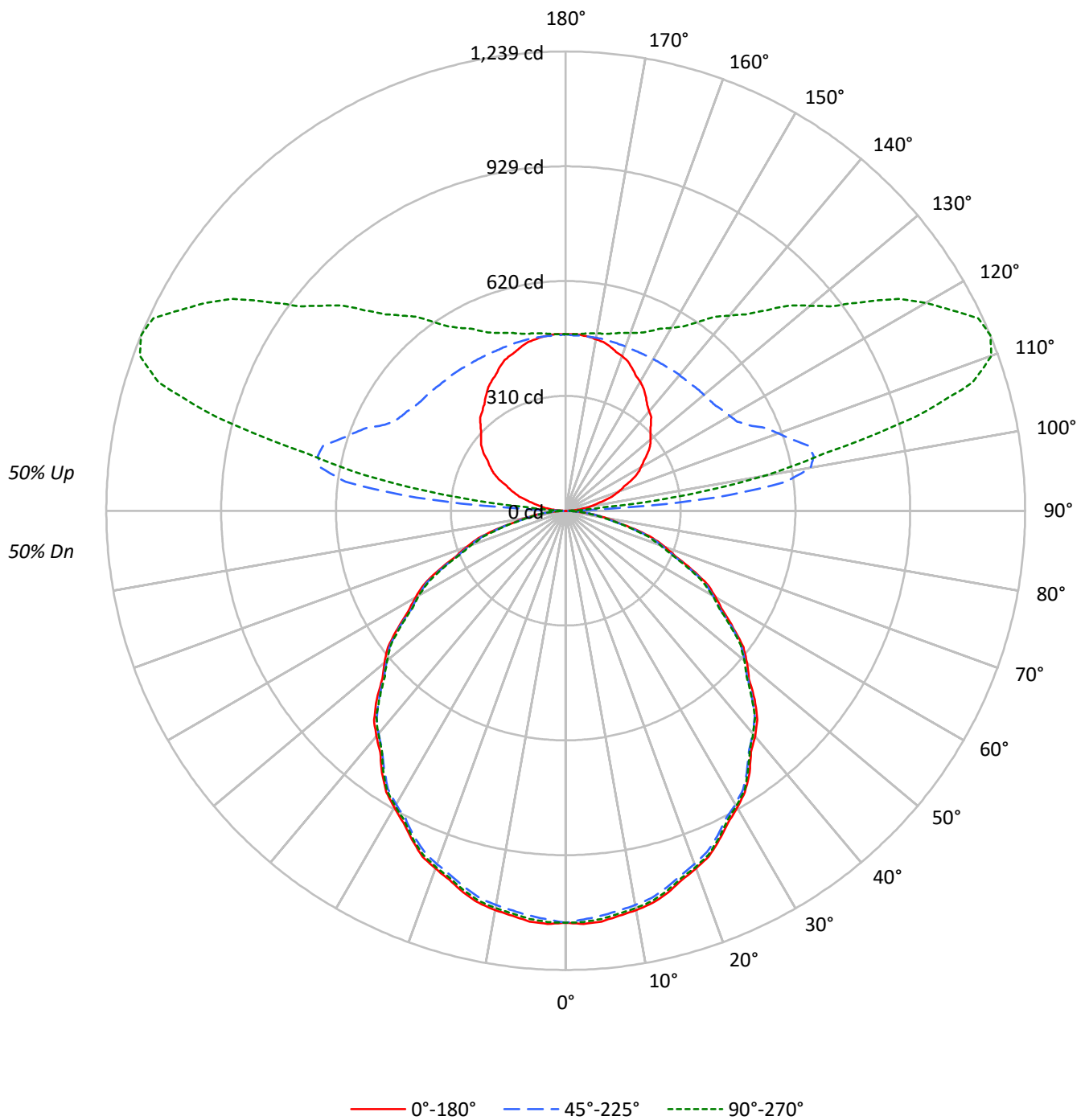
Lumens per Lamp: N/A
Luminaire Lumens: 6125.7 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57.9
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10257	10257	10257
5°	10303	10162	10239
10°	10251	10123	10200
15°	10189	10050	10130
20°	10083	9964	10046
25°	9973	9857	9935
30°	9852	9747	9796
35°	9729	9609	9659
40°	9567	9457	9465
45°	9398	9269	9239
50°	9156	9047	9024
55°	8886	8787	8726
60°	8617	8462	8435
65°	8195	8012	7947
70°	7615	7432	7286
75°	6802	6584	6445
80°	5595	5393	5148
85°	3313	3631	3716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9398 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	1.7
10°-20°	298.8	4.9
20°-30°	448.7	7.3
30°-40°	535.5	8.7
40°-50°	548.9	9.0
50°-60°	488.8	8.0
60°-70°	364.4	5.9
70°-80°	197.3	3.2
80°-90°	45.9	0.7
90°-100°	222.9	3.6
100°-110°	615.3	10.0
110°-120°	634.6	10.4
120°-130°	510.0	8.3
130°-140°	400.8	6.5
140°-150°	307.4	5.0
150°-160°	220.9	3.6
160°-170°	135.1	2.2
170°-180°	45.5	0.7
0°-30°	852.4	13.9
0°-40°	1388.0	22.7
0°-60°	2425.6	39.6
0°-90°	3033.2	49.5
90°-120°	1472.8	24.0
90°-150°	2691.0	43.9
90°-180°	3093.0	50.5
0°-180°	6125.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1112	1110	1097	1107	1106	105
15°	1067	1063	1052	1061	1061	301
25°	980	978	968	974	976	451
35°	864	860	853	855	858	539
45°	720	717	710	707	708	554
55°	552	553	546	541	542	494
65°	375	374	367	363	364	371
75°	191	188	185	181	181	203
85°	31	34	34	35	35	44
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-100D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1111.7	1111.7	1111.7	1111.7	1111.7
2.5°	1116.0	1113.6	1103.8	1111.7	1110.5
5°	1112.5	1110.3	1097.2	1107.1	1105.6
7.5°	1102.1	1099.9	1088.4	1097.5	1096.2
10°	1094.2	1091.9	1080.5	1089.6	1088.8
12.5°	1083.8	1081.6	1070.1	1079.2	1078.5
15°	1066.7	1063.0	1052.2	1060.6	1060.6
17.5°	1044.1	1041.3	1031.3	1038.3	1038.5
20°	1027.0	1024.8	1014.8	1022.5	1023.2
22.5°	1009.9	1007.7	996.5	1003.6	1004.9
25°	979.7	977.5	968.3	973.7	975.9
27.5°	948.6	945.3	936.2	941.0	942.6
30°	924.8	923.3	914.9	917.2	919.5
32.5°	899.8	898.3	891.1	892.2	896.3
35°	863.8	860.0	853.1	854.7	857.6
37.5°	821.2	819.4	812.6	811.8	814.6
40°	794.3	791.3	785.2	783.7	785.9
42.5°	765.0	762.0	754.6	753.2	756.0
45°	720.3	716.6	710.4	706.6	708.1
47.5°	670.2	670.2	663.8	659.5	661.7
50°	637.9	637.9	630.3	626.5	628.7
52.5°	604.3	604.9	596.7	594.7	593.9
55°	552.4	553.2	546.3	541.0	542.5
57.5°	502.4	500.7	492.8	489.3	490.0
60°	467.0	464.7	458.6	453.3	457.1
62.5°	431.0	429.9	423.8	417.8	417.4
65°	375.4	373.9	367.0	363.2	364.0
67.5°	320.2	318.4	312.1	306.6	308.6
70°	282.3	282.3	275.5	272.4	270.1
72.5°	247.5	244.5	239.4	235.1	233.5
75°	190.8	188.5	184.7	180.8	180.8
77.5°	138.9	136.9	134.4	131.8	131.1
80°	105.3	104.6	101.5	100.6	96.9
82.5°	74.2	74.0	72.2	70.2	70.0
85°	31.3	34.3	34.3	35.1	35.1
87.5°	5.8	9.7	9.8	8.7	8.8
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

TEST NUMBER:

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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)