

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-075D-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, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

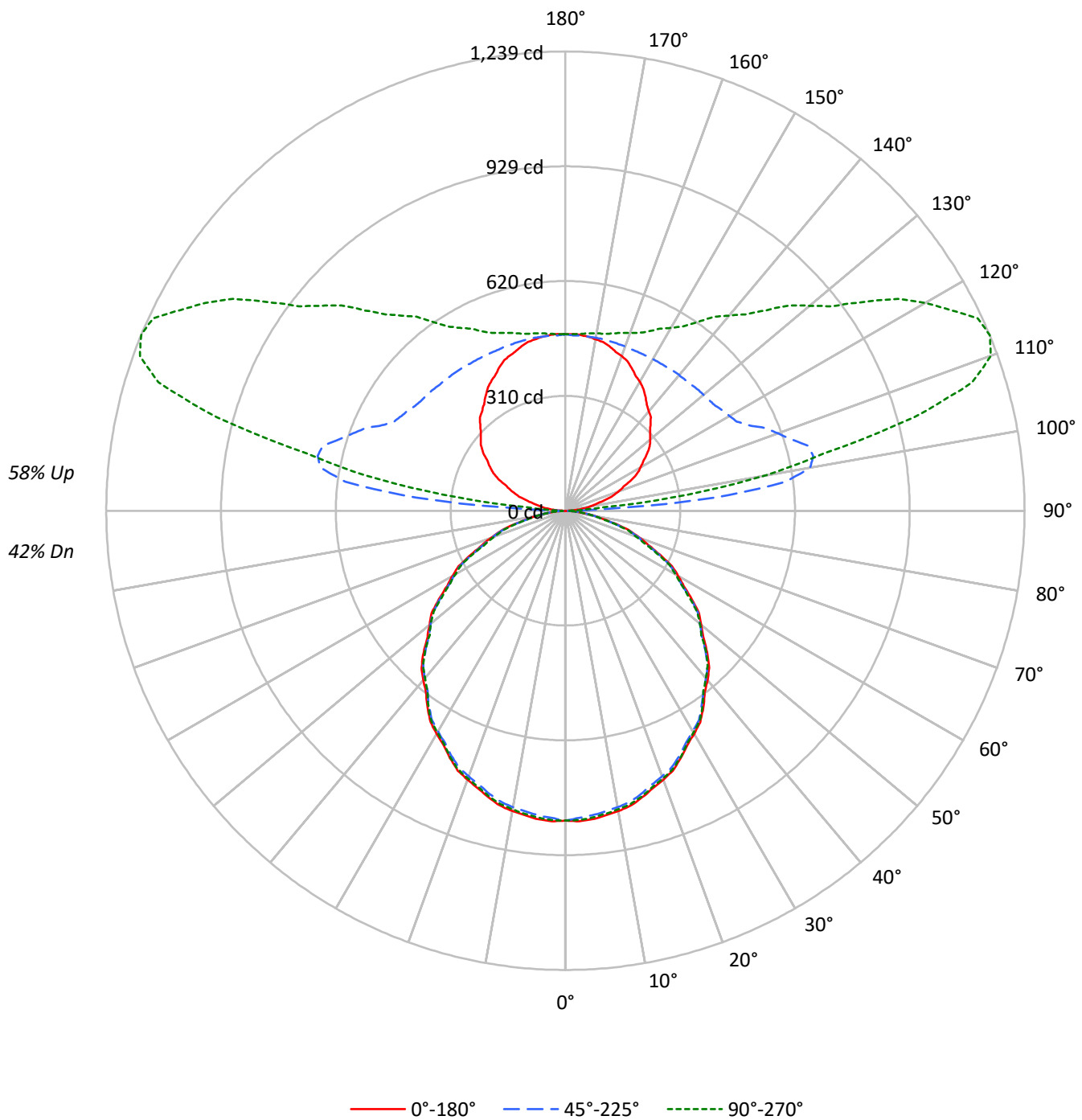
Lumens per Lamp: N/A
Luminaire Lumens: 5375.2 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 49.1
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7711	7711	7711
5°	7741	7643	7699
10°	7709	7610	7667
15°	7650	7556	7621
20°	7582	7492	7551
25°	7498	7421	7475
30°	7403	7322	7363
35°	7305	7229	7264
40°	7183	7110	7100
45°	7059	6970	6990
50°	6862	6809	6809
55°	6704	6619	6558
60°	6488	6375	6320
65°	6137	6021	5938
70°	5765	5622	5479
75°	5187	4998	4891
80°	4144	4065	4027
85°	2488	2805	2890

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7059 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	1.5
10°-20°	224.6	4.2
20°-30°	337.4	6.3
30°-40°	402.6	7.5
40°-50°	412.9	7.7
50°-60°	367.9	6.8
60°-70°	274.3	5.1
70°-80°	148.8	2.8
80°-90°	35.2	0.7
90°-100°	222.9	4.1
100°-110°	615.3	11.4
110°-120°	634.6	11.8
120°-130°	510.0	9.5
130°-140°	400.8	7.5
140°-150°	307.4	5.7
150°-160°	220.9	4.1
160°-170°	135.1	2.5
170°-180°	45.5	0.8
0°-30°	640.9	11.9
0°-40°	1043.5	19.4
0°-60°	1824.4	33.9
0°-90°	2282.7	42.5
90°-120°	1472.8	27.4
90°-150°	2691.0	50.1
90°-180°	3093.0	57.5
0°-180°	5375.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	836	834	825	832	831	79
15°	801	800	791	797	798	226
25°	736	736	729	733	734	339
35°	649	647	642	642	645	405
45°	541	539	534	534	536	416
55°	417	416	412	408	408	372
65°	281	281	276	273	272	280
75°	146	142	140	138	137	153
85°	24	25	26	26	27	33
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	835.8	835.8	835.8	835.8	835.8
2.5°	838.8	837.1	829.7	835.8	835.2
5°	835.8	834.3	825.2	832.0	831.3
7.5°	829.0	827.4	818.4	825.2	825.0
10°	822.9	820.7	812.3	819.1	818.4
12.5°	815.0	812.8	804.4	811.2	810.5
15°	800.9	799.5	791.1	797.2	797.9
17.5°	784.9	782.1	774.6	780.5	781.2
20°	772.2	769.9	763.1	768.4	769.1
22.5°	758.8	756.6	749.7	755.0	755.8
25°	736.5	735.8	729.0	732.8	734.3
27.5°	712.4	710.4	704.9	707.8	709.3
30°	694.9	693.4	687.3	689.6	691.1
32.5°	676.7	675.8	670.3	671.4	673.5
35°	648.6	647.2	641.8	641.9	644.9
37.5°	617.6	615.9	611.5	610.8	612.0
40°	596.4	594.1	590.3	589.5	589.5
42.5°	574.5	572.9	567.9	566.5	568.3
45°	541.0	538.8	534.2	534.3	535.7
47.5°	504.8	503.9	498.6	496.2	496.8
50°	478.1	479.6	474.4	471.4	474.4
52.5°	455.1	454.2	449.5	446.5	447.7
55°	416.8	416.0	411.5	407.7	407.7
57.5°	378.3	376.3	371.6	368.8	371.0
60°	351.6	350.9	345.5	340.3	342.5
62.5°	324.9	323.6	318.3	314.8	316.4
65°	281.1	281.1	275.8	272.8	272.0
67.5°	242.8	239.2	236.3	232.6	231.6
70°	213.7	210.7	208.4	205.3	203.1
72.5°	185.2	183.4	179.9	176.9	176.4
75°	145.5	142.5	140.2	137.9	137.2
77.5°	103.5	102.9	100.8	99.6	100.0
80°	78.0	78.0	76.5	76.5	75.8
82.5°	55.0	55.6	55.3	54.1	54.0
85°	23.5	25.0	26.5	26.5	27.3
87.5°	4.5	7.8	7.9	8.0	8.2
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)