

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-050U-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 (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

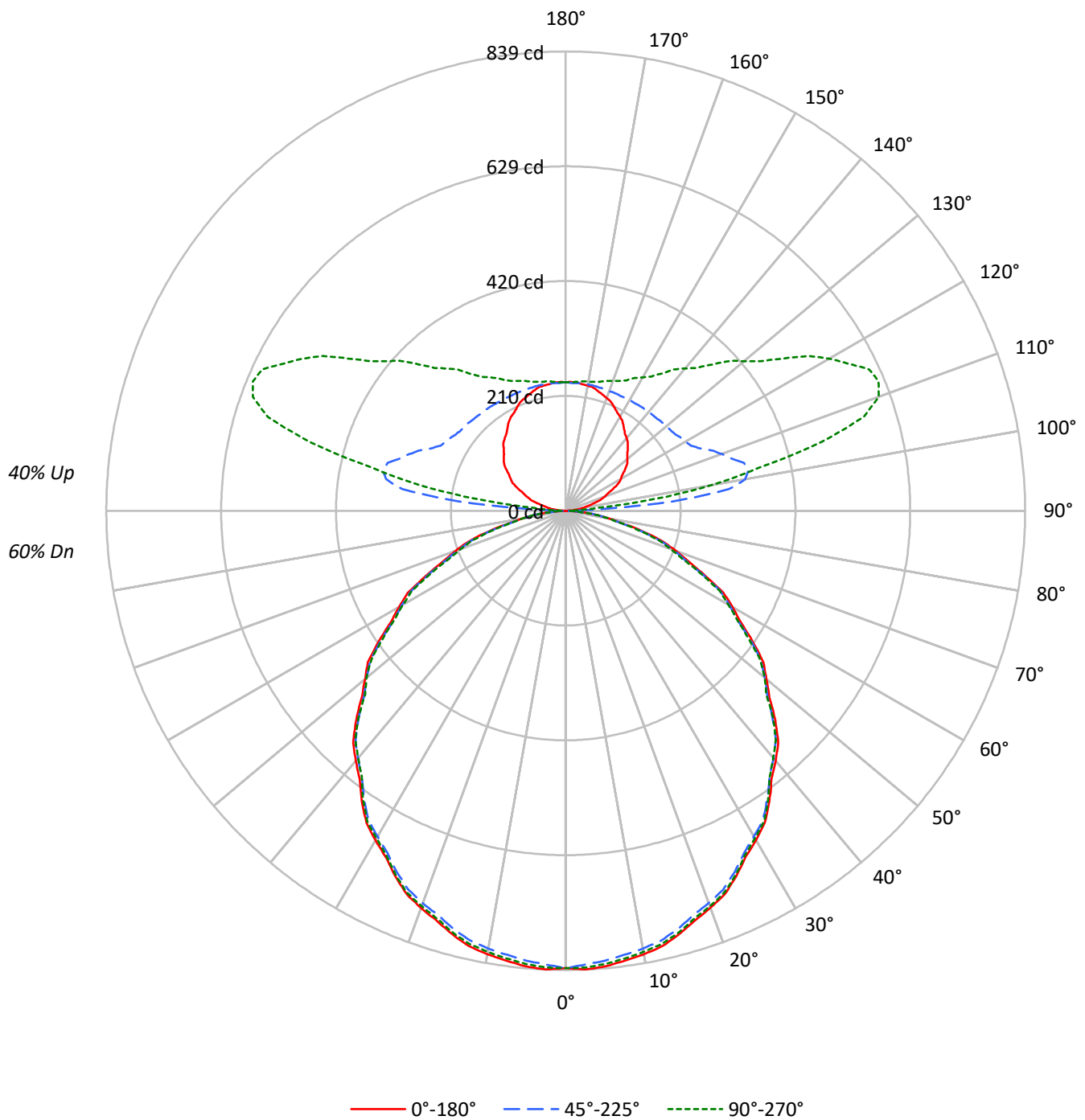
Lumens per Lamp: N/A
Luminaire Lumens: 3816.4 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17

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	2.1
10°-20°	224.6	5.9
20°-30°	337.4	8.8
30°-40°	402.6	10.6
40°-50°	412.9	10.8
50°-60°	367.9	9.6
60°-70°	274.3	7.2
70°-80°	148.8	3.9
80°-90°	35.1	0.9
90°-100°	112.8	3.0
100°-110°	306.3	8.0
110°-120°	315.0	8.3
120°-130°	251.8	6.6
130°-140°	197.9	5.2
140°-150°	151.7	4.0
150°-160°	109.1	2.9
160°-170°	66.7	1.7
170°-180°	22.5	0.6
0°-30°	640.9	16.8
0°-40°	1043.5	27.3
0°-60°	1824.4	47.8
0°-90°	2282.6	59.8
90°-120°	734.1	19.2
90°-150°	1335.5	35.0
90°-180°	1534.0	40.2
0°-180°	3816.4	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°	1	3	5	7	7	2
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

TEST NUMBER:

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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°	4.4	7.8	7.7	8.0	8.0
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)