

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-150U-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 (G3-1910-536-25, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

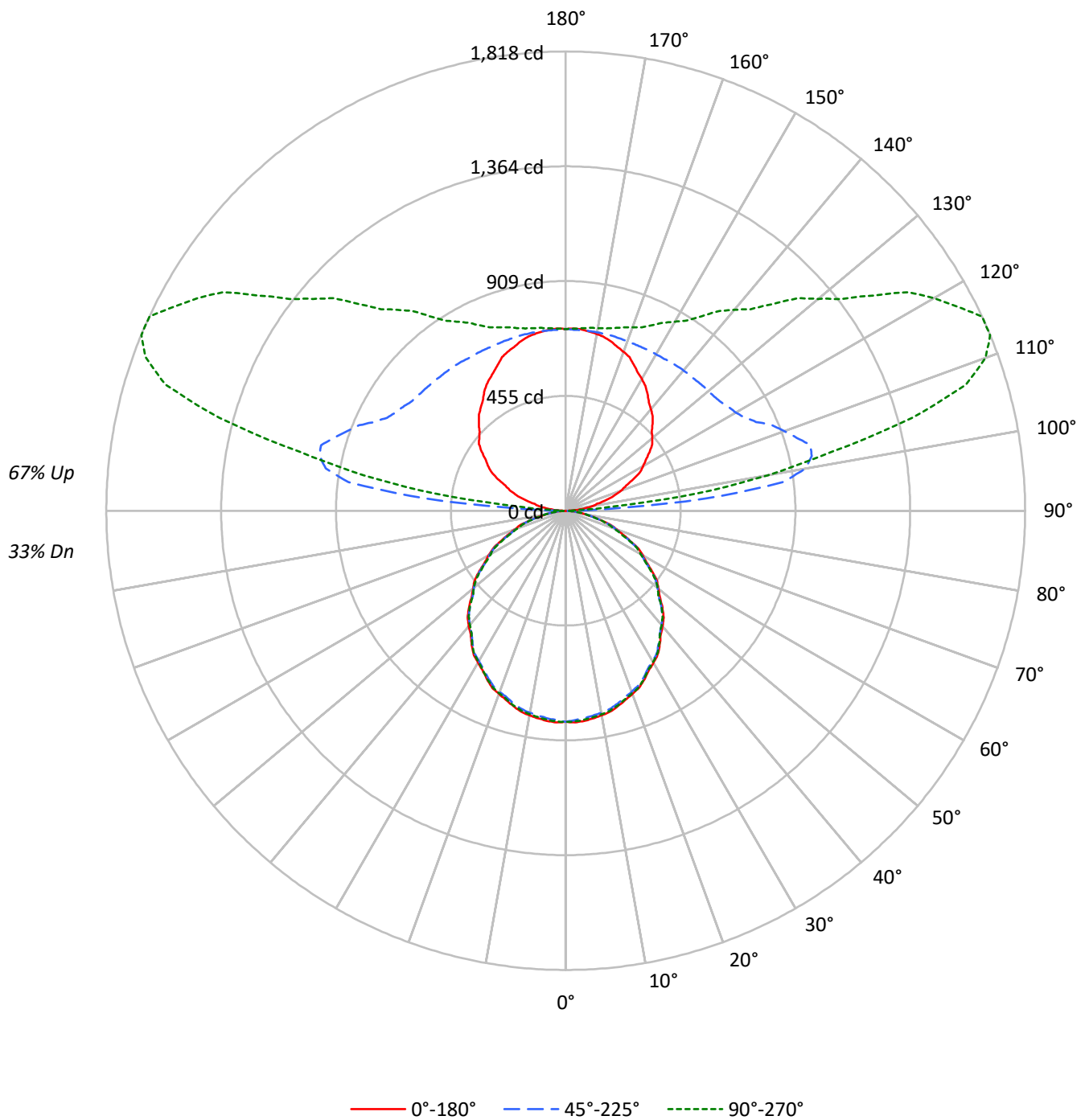
Lumens per Lamp: N/A
Luminaire Lumens: 6921.6 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
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	103	103	103	103		93	93	93	93		74	74	74		56	56	56		40	40	40
1	94	90	86	83		85	81	78	75		65	62	60		50	48	47		36	35	34
2	85	78	72	67		77	71	66	61		57	53	50		43	41	39		31	30	29
3	78	69	62	56		70	62	56	51		50	45	42		38	35	33		28	26	24
4	71	61	53	47		64	55	48	43		44	39	36		34	31	28		25	23	21
5	65	54	46	40		58	49	42	37		39	34	30		30	27	24		22	20	18
6	60	48	40	35		54	44	37	32		35	30	26		27	24	21		20	18	16
7	55	43	36	30		50	39	33	28		32	27	23		25	21	19		18	16	14
8	51	39	32	26		46	36	29	24		29	24	20		23	19	16		17	14	13
9	48	36	28	23		43	33	26	22		26	22	18		21	17	15		15	13	11
10	44	33	26	21		40	30	24	19		24	20	16		19	16	13		14	12	10

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	1.1
10°-20°	224.6	3.2
20°-30°	337.4	4.9
30°-40°	402.6	5.8
40°-50°	412.9	6.0
50°-60°	367.9	5.3
60°-70°	274.3	4.0
70°-80°	148.8	2.1
80°-90°	35.7	0.5
90°-100°	334.3	4.8
100°-110°	904.0	13.1
110°-120°	950.4	13.7
120°-130°	772.0	11.2
130°-140°	605.6	8.7
140°-150°	464.8	6.7
150°-160°	334.3	4.8
160°-170°	204.2	3.0
170°-180°	68.8	1.0
0°-30°	640.9	9.3
0°-40°	1043.5	15.1
0°-60°	1824.4	26.4
0°-90°	2283.2	33.0
90°-120°	2188.8	31.6
90°-150°	4031.1	58.2
90°-180°	4638.0	67.0
0°-180°	6921.6	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	5	10	11	10	4
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

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°	4.6	8.1	8.7	8.8	8.7
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)