

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-125U-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 (G3-1910-536-24, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-125U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

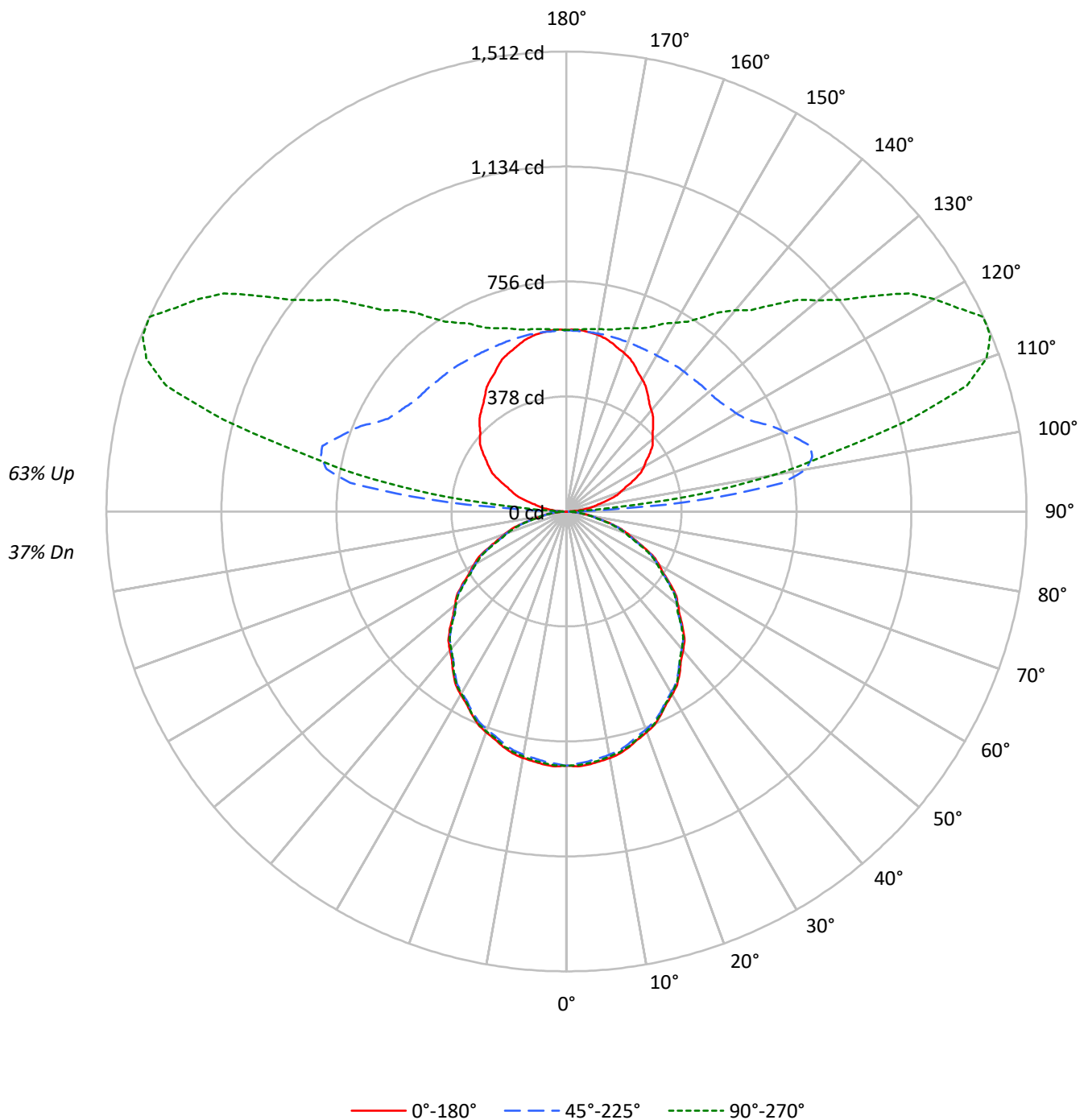
Lumens per Lamp: N/A
Luminaire Lumens: 6132.5 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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
RCR																					
0	104	104	104	104		94	94	94	94		76	76	76		60	60	60		44	44	44
1	95	91	87	83		86	82	79	76		67	64	62		52	51	50		39	38	37
2	86	79	73	68		78	72	67	62		58	55	52		46	43	41		34	33	31
3	79	69	62	56		71	63	57	52		51	47	43		41	37	35		30	28	27
4	72	61	54	48		65	56	49	44		46	41	37		36	33	30		27	25	23
5	66	54	47	41		59	50	43	38		41	35	32		32	29	26		24	22	20
6	61	49	41	35		55	45	38	32		37	31	27		29	25	22		22	19	17
7	56	44	36	31		51	40	33	28		33	28	24		26	23	20		20	17	15
8	52	40	32	27		47	36	30	25		30	25	21		24	20	17		18	16	14
9	48	36	29	24		44	33	27	22		27	22	19		22	18	16		17	14	12
10	45	33	26	21		41	30	24	20		25	20	17		20	17	14		16	13	11

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	1.3
10°-20°	224.6	3.7
20°-30°	337.4	5.5
30°-40°	402.6	6.6
40°-50°	412.9	6.7
50°-60°	367.9	6.0
60°-70°	274.3	4.5
70°-80°	148.8	2.4
80°-90°	35.6	0.6
90°-100°	278.9	4.5
100°-110°	751.4	12.3
110°-120°	788.6	12.9
120°-130°	639.9	10.4
130°-140°	501.9	8.2
140°-150°	385.3	6.3
150°-160°	277.0	4.5
160°-170°	169.3	2.8
170°-180°	57.1	0.9
0°-30°	640.9	10.5
0°-40°	1043.5	17.0
0°-60°	1824.4	29.7
0°-90°	2283.1	37.2
90°-120°	1819.0	29.7
90°-150°	3346.1	54.6
90°-180°	3849.0	62.8
0°-180°	6132.5	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	4	9	10	10	4
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

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°	4.5	8.1	8.5	8.6	8.6
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)