

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-025U-075D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

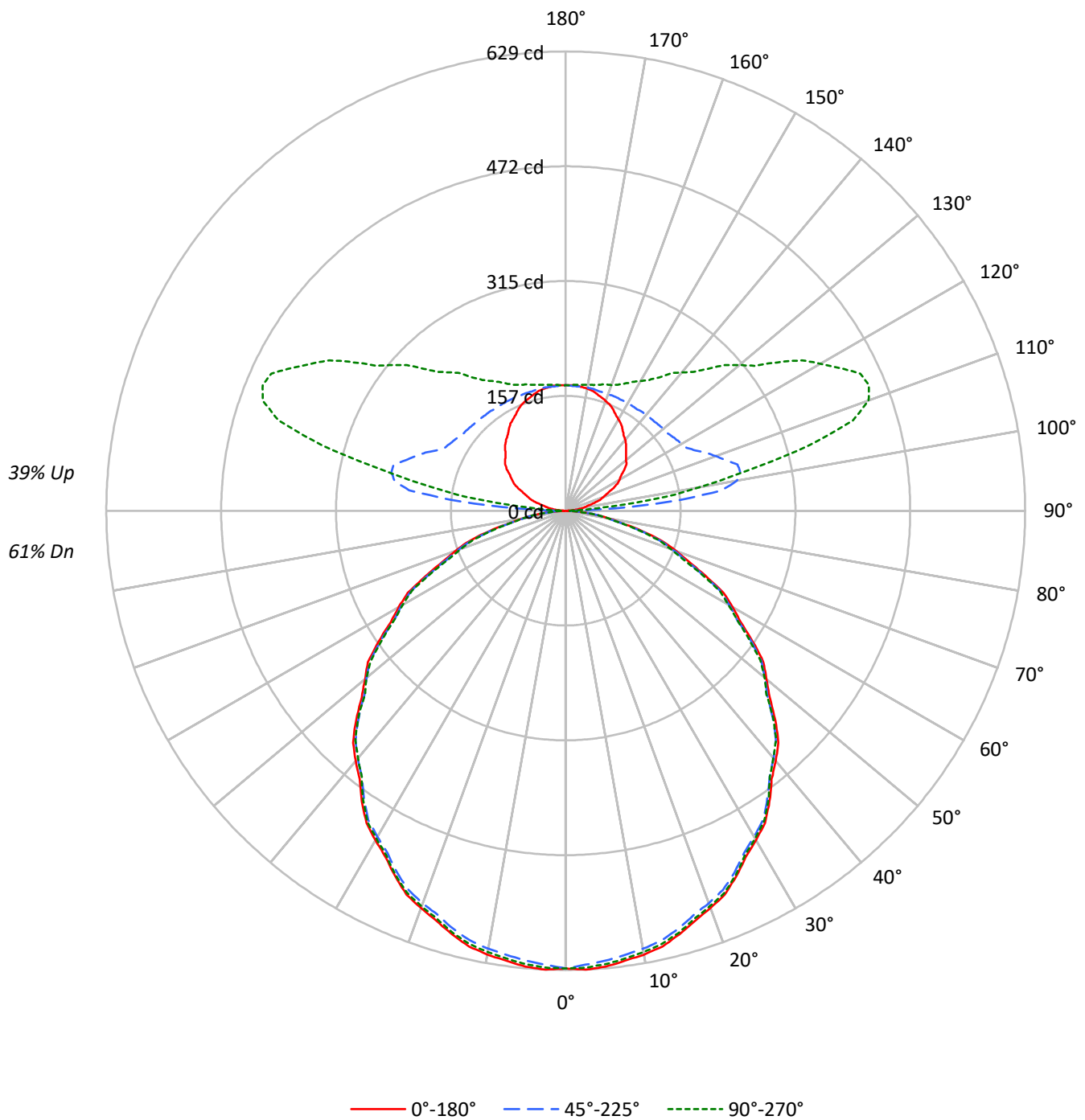
Lumens per Lamp: N/A
Luminaire Lumens: 2827.8 lumens
Efficiency: N/A
Efficacy: 58.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 48.6
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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	56
2	91	83	77	72	85	78	73	68	68	64	61	59	56	53	51	49	47
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	33	30
6	64	52	44	38	60	49	41	36	43	37	32	38	33	29	33	29	26
7	59	47	39	33	55	44	37	31	39	33	29	34	29	26	30	26	23
8	55	43	35	29	51	40	33	28	36	30	25	31	27	23	27	24	21
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19
10	48	36	28	23	45	34	27	22	30	24	21	27	22	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3856	3856	3856
5°	3871	3821	3849
10°	3855	3805	3834
15°	3825	3778	3810
20°	3791	3746	3775
25°	3749	3710	3737
30°	3701	3661	3681
35°	3653	3615	3631
40°	3592	3555	3551
45°	3530	3486	3495
50°	3431	3405	3405
55°	3352	3309	3279
60°	3244	3189	3160
65°	3068	3011	2969
70°	2883	2811	2739
75°	2593	2498	2445
80°	2072	2033	2012
85°	1242	1404	1447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3530 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	2.1
10°-20°	168.4	6.0
20°-30°	253.1	8.9
30°-40°	302.0	10.7
40°-50°	309.7	11.0
50°-60°	276.0	9.8
60°-70°	205.8	7.3
70°-80°	111.6	3.9
80°-90°	26.6	0.9
90°-100°	83.9	3.0
100°-110°	220.5	7.8
110°-120°	228.7	8.1
120°-130°	183.4	6.5
130°-140°	143.9	5.1
140°-150°	110.5	3.9
150°-160°	79.6	2.8
160°-170°	48.7	1.7
170°-180°	16.4	0.6
0°-30°	480.7	17.0
0°-40°	782.7	27.7
0°-60°	1368.3	48.4
0°-90°	1712.2	60.5
90°-120°	533.1	18.9
90°-150°	970.9	34.3
90°-180°	1116.0	39.5
0°-180°	2827.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	627	626	619	624	623	59
15°	601	600	593	598	598	169
25°	552	552	547	550	551	254
35°	486	485	481	481	484	304
45°	406	404	401	401	402	312
55°	313	312	309	306	306	279
65°	211	211	207	205	204	210
75°	109	107	105	103	103	115
85°	18	19	20	20	20	24
90°	1	3	9	4	4	1
95°	11	43	144	74	51	12
105°	40	60	244	370	345	42
115°	71	86	195	390	445	70
125°	98	110	178	300	354	87
135°	117	129	172	242	275	91
145°	136	144	170	207	223	85
155°	153	158	170	187	192	70
165°	166	168	170	177	179	47
175°	172	172	171	173	173	16
180°	172	172	172	172	172	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.9	626.9	626.9	626.9	626.9
2.5°	629.1	627.8	622.3	626.8	626.4
5°	626.9	625.7	618.9	624.0	623.4
7.5°	621.7	620.5	613.8	618.9	618.8
10°	617.2	615.5	609.2	614.3	613.8
12.5°	611.3	609.6	603.3	608.4	607.9
15°	600.7	599.6	593.3	597.9	598.4
17.5°	588.7	586.6	580.9	585.4	585.9
20°	579.1	577.4	572.3	576.3	576.8
22.5°	569.1	567.4	562.3	566.3	566.8
25°	552.4	551.8	546.7	549.6	550.7
27.5°	534.3	532.8	528.6	530.8	531.9
30°	521.1	520.0	515.5	517.2	518.3
32.5°	507.5	506.8	502.7	503.6	505.1
35°	486.5	485.4	481.4	481.4	483.6
37.5°	463.2	462.0	458.6	458.1	459.0
40°	447.3	445.6	442.7	442.2	442.2
42.5°	430.9	429.7	425.9	424.9	426.2
45°	405.8	404.1	400.7	400.7	401.8
47.5°	378.6	377.9	374.0	372.1	372.6
50°	358.6	359.7	355.8	353.5	355.8
52.5°	341.3	340.7	337.1	334.9	335.8
55°	312.6	312.0	308.6	305.8	305.8
57.5°	283.7	282.3	278.7	276.6	278.2
60°	263.7	263.1	259.2	255.2	256.9
62.5°	243.7	242.7	238.7	236.1	237.3
65°	210.8	210.8	206.9	204.6	204.0
67.5°	182.1	179.4	177.2	174.5	173.7
70°	160.3	158.0	156.3	154.0	152.3
72.5°	138.9	137.6	134.9	132.6	132.3
75°	109.1	106.9	105.1	103.4	102.9
77.5°	77.6	77.2	75.6	74.7	75.0
80°	58.5	58.5	57.4	57.4	56.8
82.5°	41.3	41.7	41.5	40.6	40.5
85°	17.6	18.7	19.9	19.9	20.5
87.5°	3.4	6.1	6.8	5.9	5.9
90°	1.1	3.3	8.8	4.4	4.4
92.5°	4.6	22.3	49.4	21.9	14.1
95°	11.0	43.4	144.5	74.5	50.8
97.5°	19.2	47.7	216.3	172.0	126.7
100°	25.4	51.3	238.3	241.5	187.6
102.5°	30.7	54.8	244.5	300.8	254.7
105°	39.7	60.2	243.8	370.2	345.3
107.5°	49.0	68.0	229.9	406.2	412.2
110°	55.2	72.4	218.5	415.4	441.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	61.3	77.7	207.9	409.6	449.3
115°	70.6	85.7	195.3	389.6	444.7
117.5°	79.7	93.5	186.7	362.0	423.0
120°	85.0	97.9	183.2	343.4	402.7
122.5°	90.3	103.2	180.5	324.8	383.3
125°	98.2	110.1	177.6	300.2	354.2
127.5°	104.6	116.7	175.2	280.4	325.9
130°	108.1	121.1	174.3	268.0	310.0
132.5°	111.7	124.6	173.4	257.3	295.0
135°	117.0	128.8	172.1	242.4	274.7
137.5°	122.5	134.1	171.9	231.2	257.7
140°	126.9	137.7	171.0	222.3	247.2
142.5°	130.4	140.3	171.0	216.1	237.4
145°	135.7	144.3	169.9	206.7	222.9
147.5°	141.0	149.4	169.9	198.9	212.3
150°	144.5	152.1	169.9	194.4	205.2
152.5°	148.1	153.9	169.9	190.8	199.0
155°	153.4	157.7	169.9	186.6	192.0
157.5°	157.3	161.4	169.9	182.8	186.7
160°	160.0	163.2	169.9	181.0	183.2
162.5°	162.6	165.0	169.9	179.2	181.4
165°	165.5	167.7	169.9	176.6	178.7
167.5°	168.2	169.2	171.0	175.5	176.3
170°	169.9	171.0	171.0	175.4	175.4
172.5°	170.8	171.0	171.0	174.5	173.7
175°	172.1	172.1	171.0	173.2	173.2
177.5°	172.1	172.1	171.2	173.0	172.1
180°	172.1	172.1	172.1	172.1	172.1

(END OF REPORT)