

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-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 (G3-1910-536-21, 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-6
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

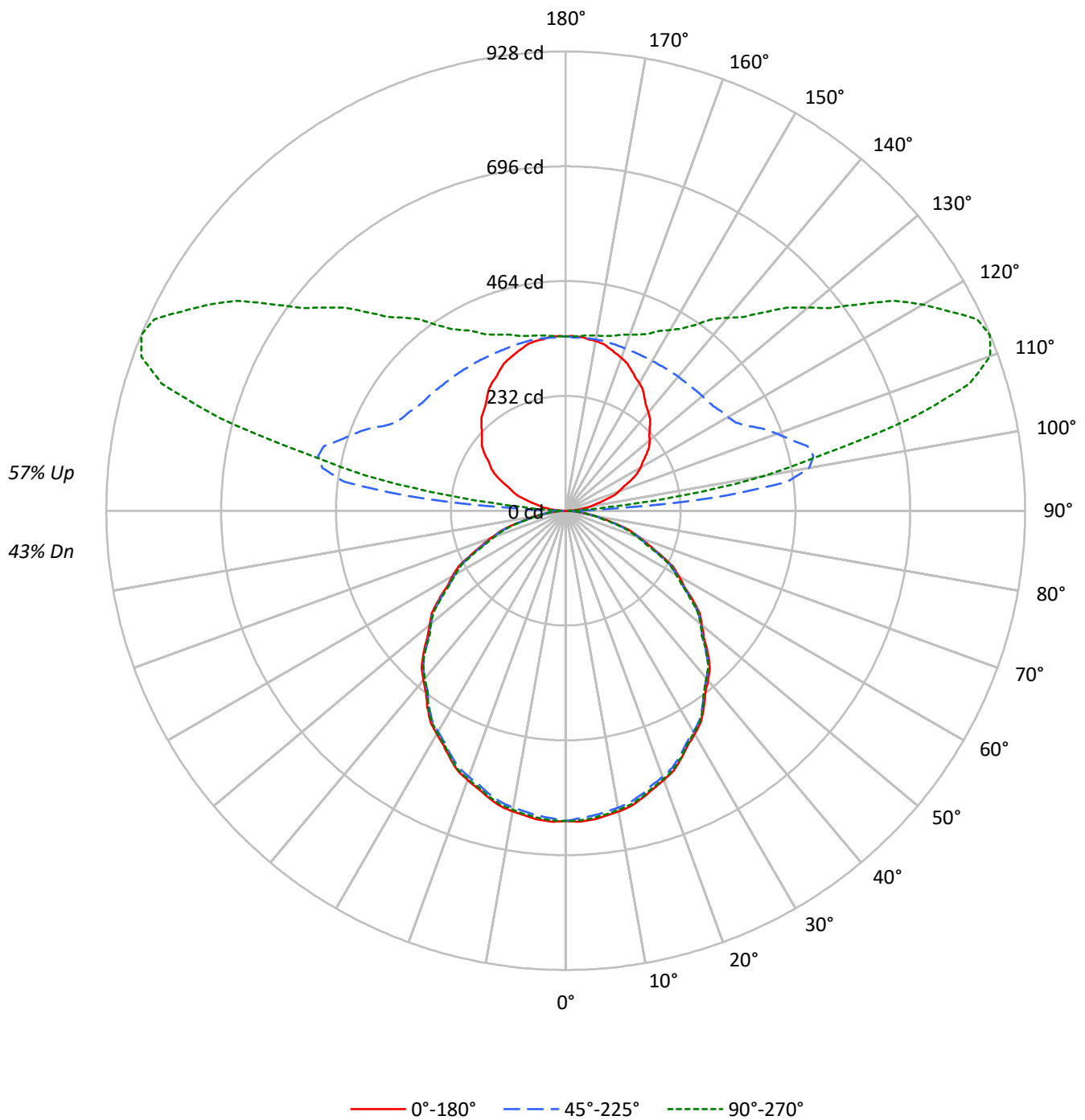
Lumens per Lamp: N/A
Luminaire Lumens: 4013.3 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	44	43	42
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	37	35
3	80	70	63	57	73	64	58	53	53	49	45	43	40	37	34	32	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	31	27	27	24	22
6	61	49	41	36	56	46	38	33	38	33	29	31	27	24	25	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	21	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	18	15	13

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	1.5
10°-20°	168.4	4.2
20°-30°	253.1	6.3
30°-40°	302.0	7.5
40°-50°	309.7	7.7
50°-60°	276.0	6.9
60°-70°	205.8	5.1
70°-80°	111.6	2.8
80°-90°	27.0	0.7
90°-100°	169.1	4.2
100°-110°	459.5	11.4
110°-120°	472.4	11.8
120°-130°	377.7	9.4
130°-140°	296.8	7.4
140°-150°	227.6	5.7
150°-160°	163.7	4.1
160°-170°	100.1	2.5
170°-180°	33.7	0.8
0°-30°	480.7	12.0
0°-40°	782.7	19.5
0°-60°	1368.3	34.1
0°-90°	1712.6	42.7
90°-120°	1101.1	27.4
90°-150°	2003.2	49.9
90°-180°	2301.0	57.3
0°-180°	4013.3	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	4	8	10	10	2
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

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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	6.3	6.6	7.0	7.0
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)