

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-PC3-050U-100D-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-050U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

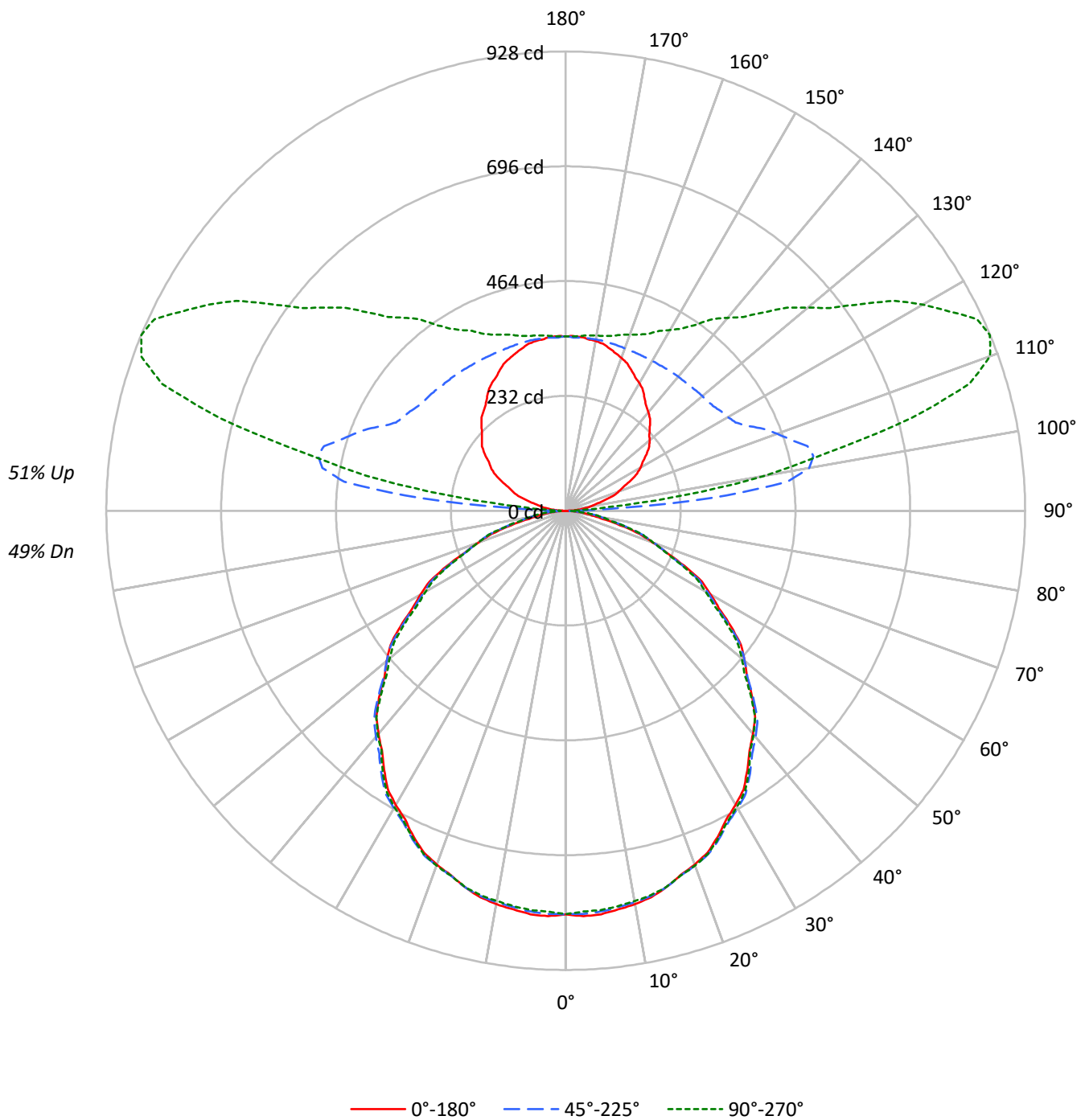
Lumens per Lamp: N/A
Luminaire Lumens: 4527.3 lumens
Efficiency: N/A
Efficacy: 61.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	31	29
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25
6	63	51	42	37	58	47	40	34	40	34	30	34	29	26	28	25	22
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	20
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5015	5015	5015
5°	5053	5020	5002
10°	5041	5017	5003
15°	5014	5014	5010
20°	4981	4996	4996
25°	4934	4970	4954
30°	4874	4933	4911
35°	4802	4875	4841
40°	4722	4789	4740
45°	4636	4669	4597
50°	4516	4516	4443
55°	4372	4315	4251
60°	4160	4077	4012
65°	3845	3769	3736
70°	3367	3394	3381
75°	2709	2997	3013
80°	1927	2540	2568
85°	1172	2131	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 4669 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.2	1.7
10°-20°	221.4	4.9
20°-30°	335.3	7.4
30°-40°	402.0	8.9
40°-50°	409.9	9.1
50°-60°	357.8	7.9
60°-70°	256.2	5.7
70°-80°	132.0	2.9
80°-90°	34.7	0.8
90°-100°	169.1	3.7
100°-110°	459.5	10.1
110°-120°	472.4	10.4
120°-130°	377.7	8.3
130°-140°	296.8	6.6
140°-150°	227.6	5.0
150°-160°	163.7	3.6
160°-170°	100.1	2.2
170°-180°	33.7	0.7
0°-30°	634.0	14.0
0°-40°	1036.0	22.9
0°-60°	1803.8	39.8
0°-90°	2226.6	49.2
90°-120°	1101.1	24.3
90°-150°	2003.2	44.2
90°-180°	2301.0	50.8
0°-180°	4527.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	818	810	813	811	810	78
15°	787	781	787	787	787	222
25°	727	722	732	730	730	335
35°	640	638	649	645	645	400
45°	533	532	537	530	528	410
55°	408	402	402	396	396	363
65°	264	258	259	257	257	261
75°	114	119	126	127	127	123
85°	17	26	30	31	30	23
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	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	815.4	815.4	815.4	815.4	815.4
2.5°	820.2	813.1	815.4	813.5	810.5
5°	818.4	810.3	813.1	810.8	810.1
7.5°	812.5	804.4	808.1	806.6	805.8
10°	807.1	798.9	803.3	801.8	801.0
12.5°	799.8	792.3	797.2	795.7	795.6
15°	787.4	780.8	787.4	787.4	786.7
17.5°	771.9	765.8	772.9	773.4	772.9
20°	761.0	754.4	763.3	762.5	763.3
22.5°	747.7	742.3	751.8	749.8	750.6
25°	727.0	721.9	732.3	730.0	730.0
27.5°	702.6	698.9	710.3	707.9	707.9
30°	686.3	682.6	694.6	691.5	691.5
32.5°	668.1	665.6	677.1	673.4	673.4
35°	639.5	638.0	649.3	644.7	644.7
37.5°	609.9	608.5	618.8	613.3	611.5
40°	588.1	587.4	596.4	590.4	590.4
42.5°	566.4	565.6	573.5	566.2	566.2
45°	533.0	531.5	536.8	530.0	528.5
47.5°	496.6	495.1	498.4	491.0	490.3
50°	471.9	470.4	471.9	465.0	464.3
52.5°	446.5	443.8	444.1	437.3	437.1
55°	407.7	402.5	402.4	396.4	396.4
57.5°	366.6	359.8	360.4	355.3	354.5
60°	338.2	330.8	331.4	326.9	326.1
62.5°	310.4	301.9	303.6	298.5	298.4
65°	264.2	258.3	259.0	256.7	256.7
67.5°	219.8	214.4	218.3	216.5	216.4
70°	187.2	183.5	188.7	188.7	188.0
72.5°	157.0	156.9	163.4	163.4	163.8
75°	114.0	119.2	126.1	126.8	126.8
77.5°	76.1	85.3	92.9	93.2	93.0
80°	54.4	64.7	71.7	73.2	72.5
82.5°	36.8	47.8	53.6	55.1	54.4
85°	16.6	25.5	30.2	30.9	30.2
87.5°	5.1	11.0	13.7	14.1	12.9
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)