

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-PP3-050U-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-PP3-050U-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

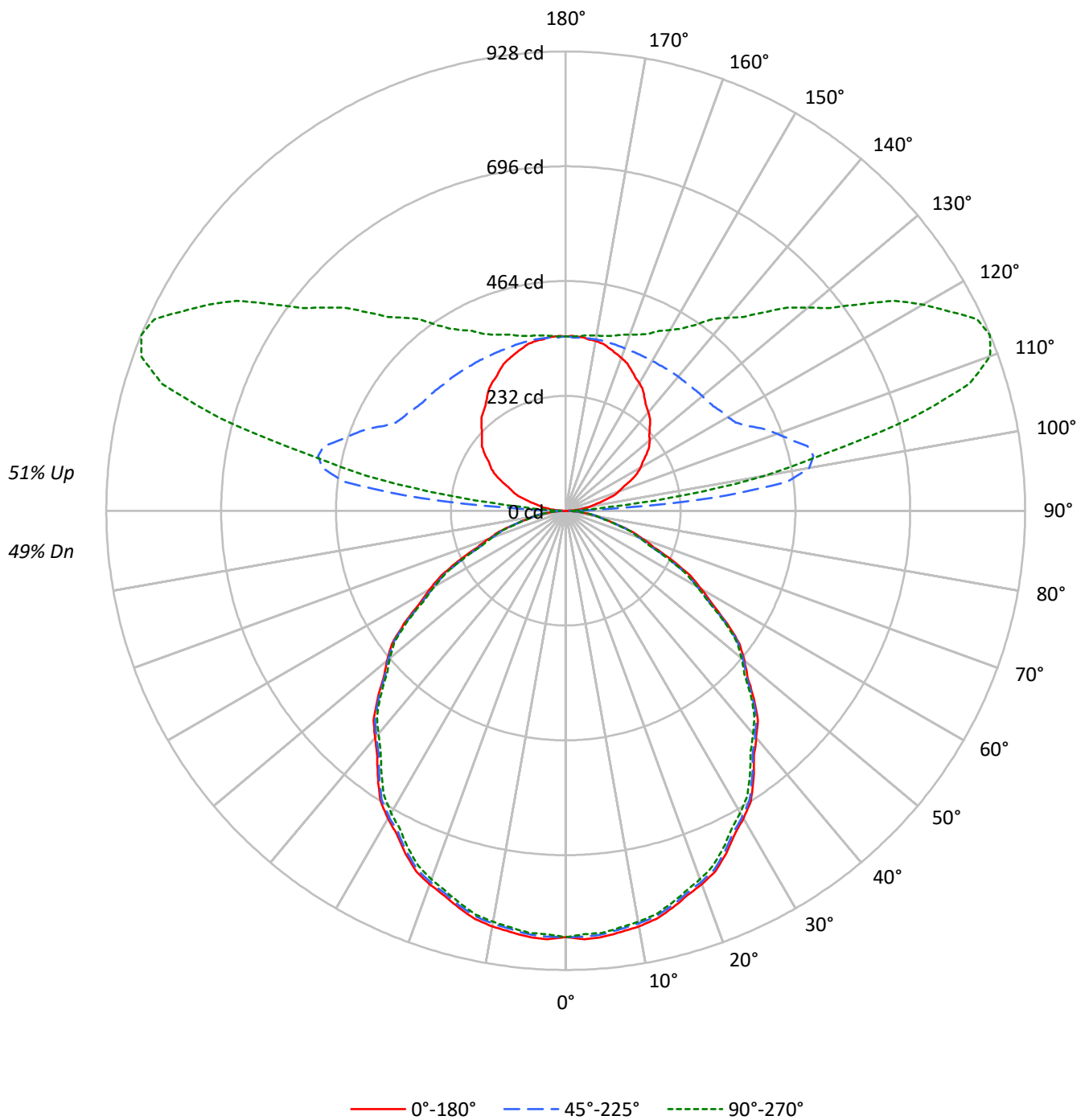
Lumens per Lamp: N/A
Luminaire Lumens: 4506.7 lumens
Efficiency: N/A
Efficacy: 61.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-050U-100D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-050U-100D-927-1D-UNV-STD-W-6

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	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	71	68	60	59	57	49	48	47
2	89	82	76	71	82	76	70	66	64	60	57	53	51	48	43	42	40
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	39	36	34
4	75	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	29
5	68	57	49	43	63	53	46	40	45	40	35	38	34	30	31	28	26
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5298	5298	5298
5°	5337	5304	5286
10°	5328	5291	5267
15°	5293	5264	5235
20°	5258	5228	5189
25°	5195	5159	5108
30°	5099	5072	5008
35°	4966	4932	4869
40°	4807	4777	4722
45°	4675	4643	4597
50°	4508	4479	4435
55°	4274	4218	4185
60°	3891	3780	3762
65°	3427	3285	3275
70°	2960	2838	2838
75°	2548	2512	2476
80°	2246	2274	2221
85°	1757	1920	1920

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4675 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-050U-100D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	1.8
10°-20°	232.6	5.2
20°-30°	348.4	7.7
30°-40°	408.6	9.1
40°-50°	409.9	9.1
50°-60°	349.7	7.8
60°-70°	228.0	5.1
70°-80°	114.4	2.5
80°-90°	33.0	0.7
90°-100°	169.1	3.8
100°-110°	459.5	10.2
110°-120°	472.4	10.5
120°-130°	377.7	8.4
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°	662.4	14.7
0°-40°	1071.0	23.8
0°-60°	1830.6	40.6
0°-90°	2206.1	49.0
90°-120°	1101.1	24.4
90°-150°	2003.2	44.4
90°-180°	2301.0	51.1
0°-180°	4506.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	861	861	861	861	861	
5°	864	856	859	856	856	82
15°	831	823	827	824	822	234
25°	766	757	760	753	753	352
35°	661	655	657	649	648	413
45°	538	534	534	528	528	414
55°	399	397	393	391	390	354
65°	236	231	226	224	225	235
75°	107	107	106	105	104	116
85°	25	27	27	27	27	29
90°	1	4	8	10	10	3
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:

CATALOG NUMBER: SQ4-PP3-050U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	861.4	861.4	861.4	861.4	861.4
2.5°	866.8	859.7	861.4	860.1	856.6
5°	864.4	856.3	859.1	856.1	856.1
7.5°	858.5	849.7	852.5	849.5	849.3
10°	853.1	844.2	847.1	844.0	843.3
12.5°	845.2	836.4	839.8	836.2	836.0
15°	831.2	823.1	826.7	823.6	822.1
17.5°	815.3	806.5	810.8	806.6	806.0
20°	803.3	794.4	798.7	792.7	792.7
22.5°	788.8	779.9	784.8	777.0	777.0
25°	765.5	756.7	760.2	753.4	752.7
27.5°	737.9	729.2	732.9	725.2	725.1
30°	718.0	709.8	714.2	705.9	705.1
32.5°	696.2	688.7	691.8	683.5	682.8
35°	661.3	654.7	656.8	649.2	648.5
37.5°	624.6	617.9	620.3	613.8	613.5
40°	598.7	594.2	594.9	589.6	588.1
42.5°	574.5	569.5	570.1	564.8	564.6
45°	537.5	533.8	533.8	528.5	528.5
47.5°	498.3	495.5	494.6	490.3	490.1
50°	471.1	468.9	468.1	464.3	463.5
52.5°	442.7	441.7	439.1	435.9	435.8
55°	398.6	397.1	393.3	391.0	390.3
57.5°	350.8	347.8	343.5	340.2	340.8
60°	316.3	313.4	307.3	305.8	305.8
62.5°	283.1	279.6	273.4	271.4	272.5
65°	235.5	231.1	225.7	224.2	225.0
67.5°	192.4	188.4	182.5	182.5	181.9
70°	164.6	162.4	157.8	157.8	157.8
72.5°	139.8	138.8	135.4	135.4	134.8
75°	107.2	107.2	105.7	104.9	104.2
77.5°	80.3	80.6	79.9	79.1	77.8
80°	63.4	64.9	64.2	63.4	62.7
82.5°	47.7	49.2	49.1	47.7	47.6
85°	24.9	27.1	27.2	27.2	27.2
87.5°	6.9	9.9	11.2	11.7	12.3
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

TEST NUMBER:

CATALOG NUMBER: SQ4-PP3-050U-100D-927-1D-UNV-STD-W-6

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)