

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-PW1-050U-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-PW1-050U-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

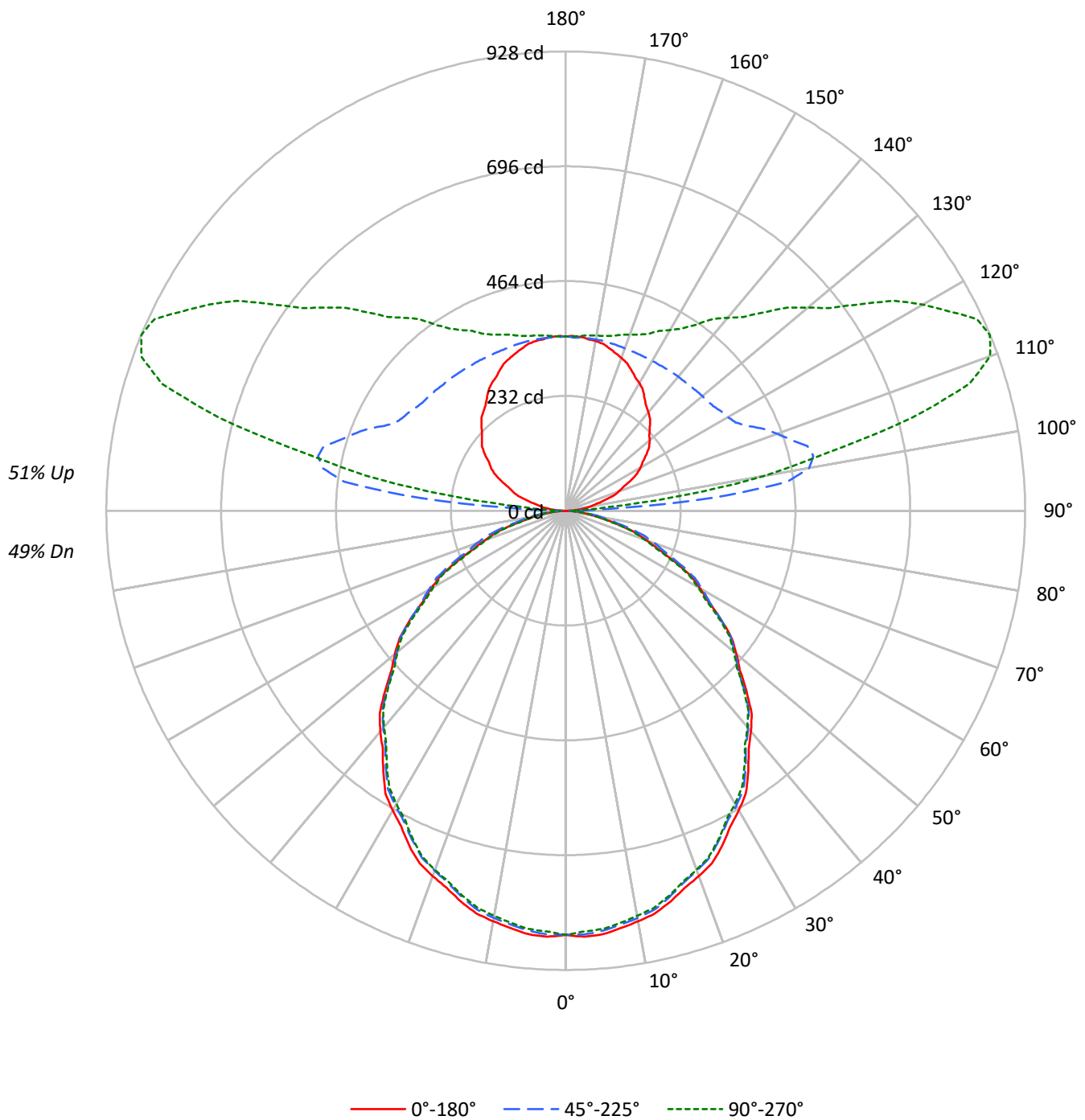
Lumens per Lamp: N/A
Luminaire Lumens: 4482.1 lumens
Efficiency: N/A
Efficacy: 61.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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-PW1-050U-100D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-050U-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	93	89	86	90	86	83	80	73	70	68	60	58	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	59	74	66	60	55	56	51	48	47	43	40	38	36	34
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29
5	68	57	48	43	63	52	45	40	45	39	35	37	33	30	31	28	25
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22
7	58	46	38	32	53	43	36	30	37	31	27	31	26	23	25	22	20
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	18	16
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5271	5271	5271
5°	5304	5262	5240
10°	5262	5220	5191
15°	5206	5149	5129
20°	5144	5065	5055
25°	5072	4980	4964
30°	4965	4890	4858
35°	4824	4756	4728
40°	4674	4601	4582
45°	4492	4433	4413
50°	4306	4270	4241
55°	4105	4105	4040
60°	3854	3928	3789
65°	3526	3703	3439
70°	3109	3408	3028
75°	2655	3049	2583
80°	2058	2568	2086
85°	1334	1969	1757

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4492 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-050U-100D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	1.8
10°-20°	227.8	5.1
20°-30°	337.9	7.5
30°-40°	395.4	8.8
40°-50°	393.6	8.8
50°-60°	339.9	7.6
60°-70°	244.7	5.5
70°-80°	128.3	2.9
80°-90°	33.2	0.7
90°-100°	169.1	3.8
100°-110°	459.5	10.3
110°-120°	472.4	10.5
120°-130°	377.7	8.4
130°-140°	296.8	6.6
140°-150°	227.6	5.1
150°-160°	163.7	3.7
160°-170°	100.1	2.2
170°-180°	33.7	0.8
0°-30°	646.4	14.4
0°-40°	1041.8	23.2
0°-60°	1775.3	39.6
0°-90°	2181.5	48.7
90°-120°	1101.1	24.6
90°-150°	2003.2	44.7
90°-180°	2301.0	51.3
0°-180°	4482.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	859	850	852	850	849	81
15°	818	807	809	807	806	230
25°	747	735	734	729	732	344
35°	642	634	633	627	630	402
45°	516	512	510	508	507	398
55°	383	382	383	378	377	342
65°	242	250	254	244	236	240
75°	112	122	128	120	109	120
85°	19	25	28	26	25	25
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:

CATALOG NUMBER: SQ4-PW1-050U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.9	856.9	856.9	856.9	856.9
2.5°	861.7	854.6	856.9	855.0	850.8
5°	859.1	849.5	852.3	850.0	848.6
7.5°	850.4	841.5	843.6	841.1	840.3
10°	842.5	833.7	835.7	832.7	831.2
12.5°	833.5	824.0	826.1	823.0	822.1
15°	817.6	807.3	808.6	807.0	805.5
17.5°	799.2	788.7	788.9	786.5	786.2
20°	785.9	774.8	773.8	770.8	772.3
22.5°	771.4	759.7	758.7	754.5	756.6
25°	747.4	734.9	733.8	729.3	731.5
27.5°	719.6	707.2	707.2	701.0	703.3
30°	699.1	687.3	688.5	681.0	684.0
32.5°	677.3	666.7	667.4	659.9	662.8
35°	642.5	633.6	633.4	627.4	629.6
37.5°	606.8	599.0	597.8	594.3	594.9
40°	582.1	575.4	573.0	570.7	570.7
42.5°	556.1	550.0	547.6	546.0	545.4
45°	516.4	512.0	509.6	508.1	507.3
47.5°	477.1	473.0	470.9	469.9	469.1
50°	450.0	447.0	446.2	443.9	443.2
52.5°	422.8	421.0	420.2	417.3	416.6
55°	382.8	382.0	382.8	377.5	376.7
57.5°	341.1	342.3	344.7	337.6	335.8
60°	313.3	316.3	319.3	311.0	308.0
62.5°	284.9	289.6	294.0	284.4	280.2
65°	242.3	249.7	254.4	244.4	236.3
67.5°	201.3	210.4	216.1	205.3	196.1
70°	172.9	183.2	189.5	178.7	168.4
72.5°	148.1	159.6	164.7	154.5	144.2
75°	111.7	122.1	128.3	119.8	108.7
77.5°	79.3	89.0	94.2	86.8	77.6
80°	58.1	68.5	72.5	66.3	58.9
82.5°	41.2	49.8	52.5	48.8	43.8
85°	18.9	24.8	27.9	26.4	24.9
87.5°	5.1	9.9	13.1	13.5	14.1
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-PW1-050U-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)