

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-PW1-025U-050D-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-025U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

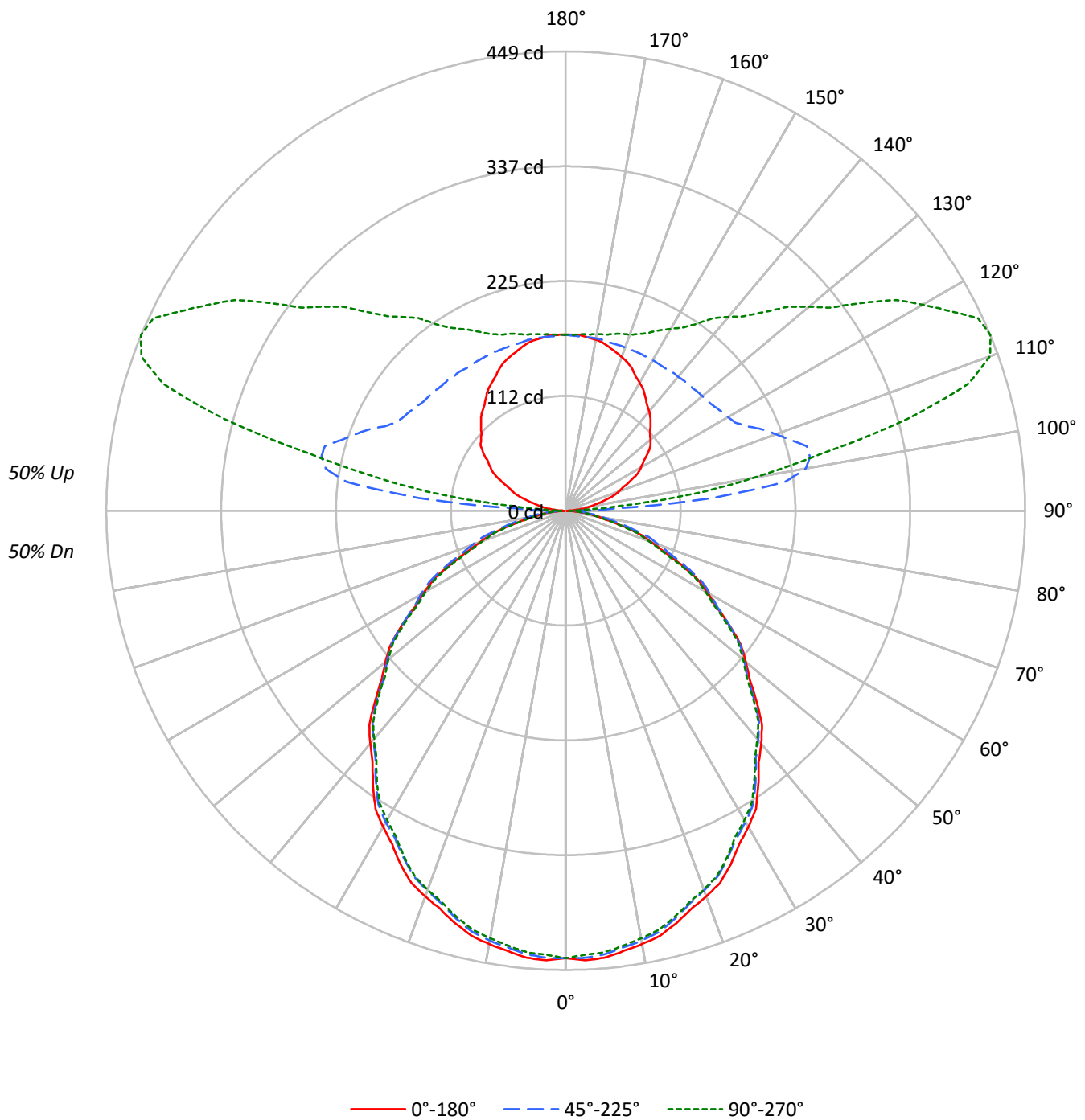
Lumens per Lamp: N/A
Luminaire Lumens: 2229.8 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.9
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				0
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	56	56	56
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48
2	89	82	76	71	82	76	70	66	64	60	57	54	51	48	44	42	40
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	39	36	34
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	30
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	32	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	29	24	21	24	21	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°	2691	2691	2691
5°	2709	2687	2675
10°	2687	2666	2651
15°	2659	2629	2619
20°	2627	2586	2582
25°	2590	2543	2535
30°	2536	2497	2481
35°	2464	2428	2414
40°	2386	2349	2340
45°	2294	2263	2254
50°	2199	2180	2165
55°	2096	2096	2063
60°	1968	2006	1935
65°	1800	1891	1757
70°	1588	1741	1547
75°	1357	1557	1319
80°	1052	1311	1066
85°	677	1009	896

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2294 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	1.8
10°-20°	116.3	5.2
20°-30°	172.5	7.7
30°-40°	201.9	9.1
40°-50°	201.0	9.0
50°-60°	173.6	7.8
60°-70°	124.9	5.6
70°-80°	65.5	2.9
80°-90°	17.2	0.8
90°-100°	83.9	3.8
100°-110°	220.5	9.9
110°-120°	228.7	10.3
120°-130°	183.4	8.2
130°-140°	143.9	6.5
140°-150°	110.5	5.0
150°-160°	79.6	3.6
160°-170°	48.7	2.2
170°-180°	16.4	0.7
0°-30°	330.1	14.8
0°-40°	532.0	23.9
0°-60°	906.5	40.7
0°-90°	1114.2	50.0
90°-120°	533.1	23.9
90°-150°	970.9	43.5
90°-180°	1116.0	50.1
0°-180°	2229.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	439	434	435	434	433	42
15°	418	412	413	412	411	118
25°	382	375	375	372	374	175
35°	328	324	323	320	322	205
45°	264	261	260	259	259	203
55°	196	195	196	193	192	174
65°	124	128	130	125	121	123
75°	57	62	66	61	56	61
85°	10	13	14	14	13	13
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°	437.5	437.5	437.5	437.5	437.5
2.5°	440.0	436.4	437.5	436.6	434.5
5°	438.7	433.8	435.2	434.1	433.3
7.5°	434.2	429.7	430.8	429.5	429.1
10°	430.2	425.7	426.8	425.2	424.4
12.5°	425.6	420.8	421.8	420.3	419.8
15°	417.5	412.2	412.9	412.1	411.3
17.5°	408.1	402.7	402.9	401.6	401.5
20°	401.3	395.7	395.1	393.6	394.4
22.5°	393.9	388.0	387.4	385.3	386.4
25°	381.6	375.2	374.7	372.4	373.6
27.5°	367.5	361.1	361.1	357.9	359.1
30°	357.0	350.9	351.6	347.8	349.3
32.5°	345.9	340.4	340.8	337.0	338.5
35°	328.1	323.5	323.4	320.4	321.5
37.5°	309.9	305.9	305.2	303.5	303.8
40°	297.2	293.8	292.6	291.4	291.4
42.5°	284.0	280.9	279.6	278.8	278.5
45°	263.7	261.4	260.2	259.4	259.1
47.5°	243.6	241.5	240.5	239.9	239.6
50°	229.8	228.3	227.8	226.7	226.3
52.5°	215.9	215.0	214.6	213.1	212.7
55°	195.5	195.1	195.5	192.7	192.4
57.5°	174.2	174.8	176.0	172.4	171.5
60°	160.0	161.5	163.1	158.8	157.3
62.5°	145.5	147.9	150.1	145.2	143.1
65°	123.7	127.5	129.9	124.8	120.7
67.5°	102.8	107.4	110.3	104.8	100.2
70°	88.3	93.6	96.8	91.2	86.0
72.5°	75.6	81.5	84.1	78.9	73.6
75°	57.1	62.3	65.5	61.2	55.5
77.5°	40.5	45.5	48.1	44.3	39.6
80°	29.7	35.0	37.0	33.8	30.1
82.5°	21.0	25.4	26.8	24.9	22.4
85°	9.6	12.7	14.3	13.5	12.7
87.5°	2.7	5.2	7.6	6.7	7.1
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)