

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-PW1-075U-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-075U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

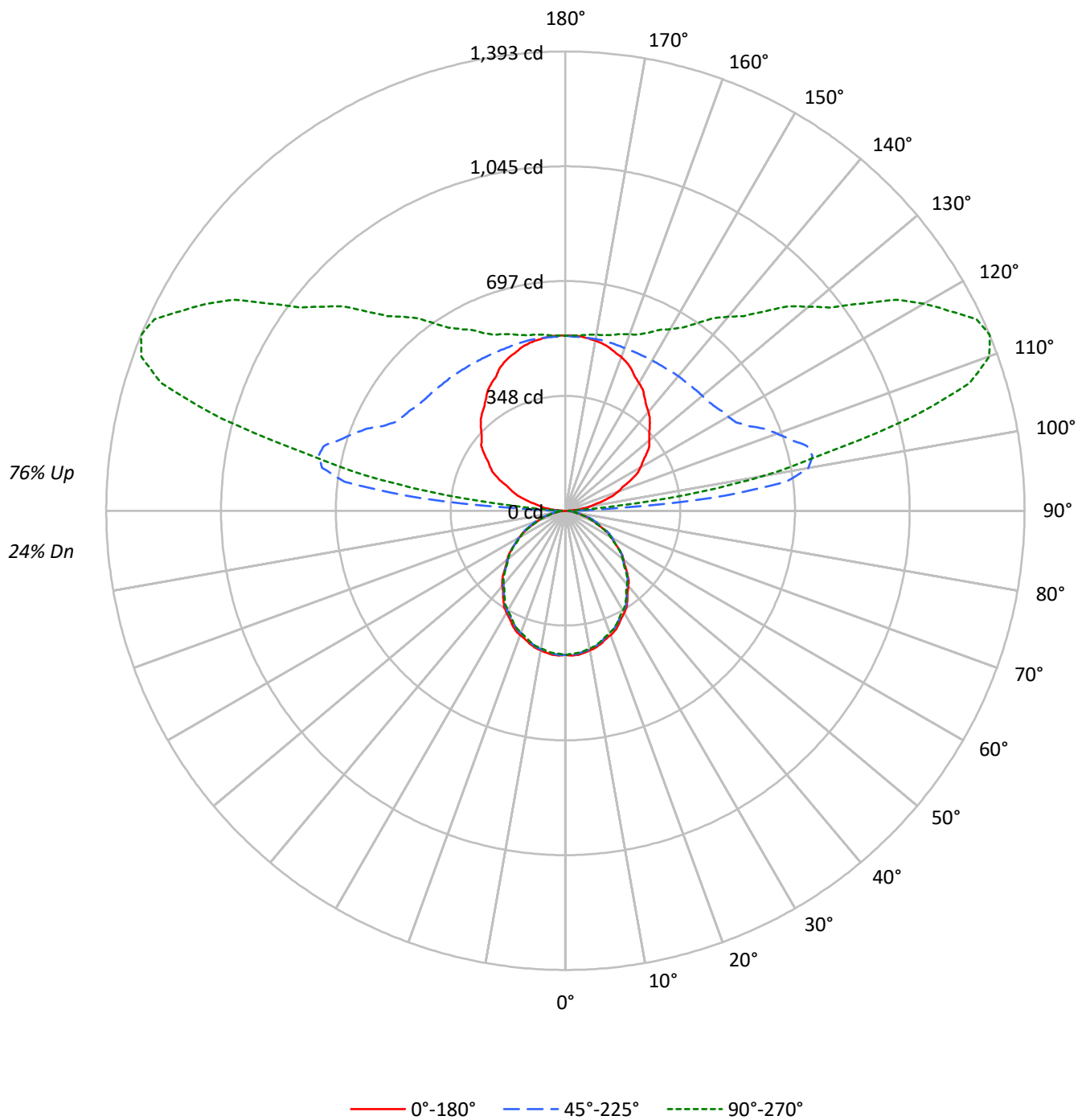
Lumens per Lamp: N/A
Luminaire Lumens: 4572.4 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	78	75	73	60	58	57	44	43	42	29	28	28
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	25	24	23
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	23	21	20
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10
9	47	35	28	23	41	31	25	21	25	20	17	19	15	13	13	11	9
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8

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	0.9
10°-20°	116.3	2.5
20°-30°	172.5	3.8
30°-40°	201.9	4.4
40°-50°	201.0	4.4
50°-60°	173.6	3.8
60°-70°	124.9	2.7
70°-80°	65.5	1.4
80°-90°	17.6	0.4
90°-100°	250.3	5.5
100°-110°	688.7	15.1
110°-120°	710.9	15.5
120°-130°	569.6	12.5
130°-140°	447.4	9.8
140°-150°	342.8	7.5
150°-160°	246.5	5.4
160°-170°	150.7	3.3
170°-180°	50.8	1.1
0°-30°	330.1	7.2
0°-40°	532.0	11.6
0°-60°	906.5	19.8
0°-90°	1114.6	24.4
90°-120°	1650.0	36.1
90°-150°	3009.8	65.8
90°-180°	3458.0	75.6
0°-180°	4572.4	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	4	8	10	10	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

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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	5.5	7.4	7.9	8.2
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)