

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-4

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-4
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

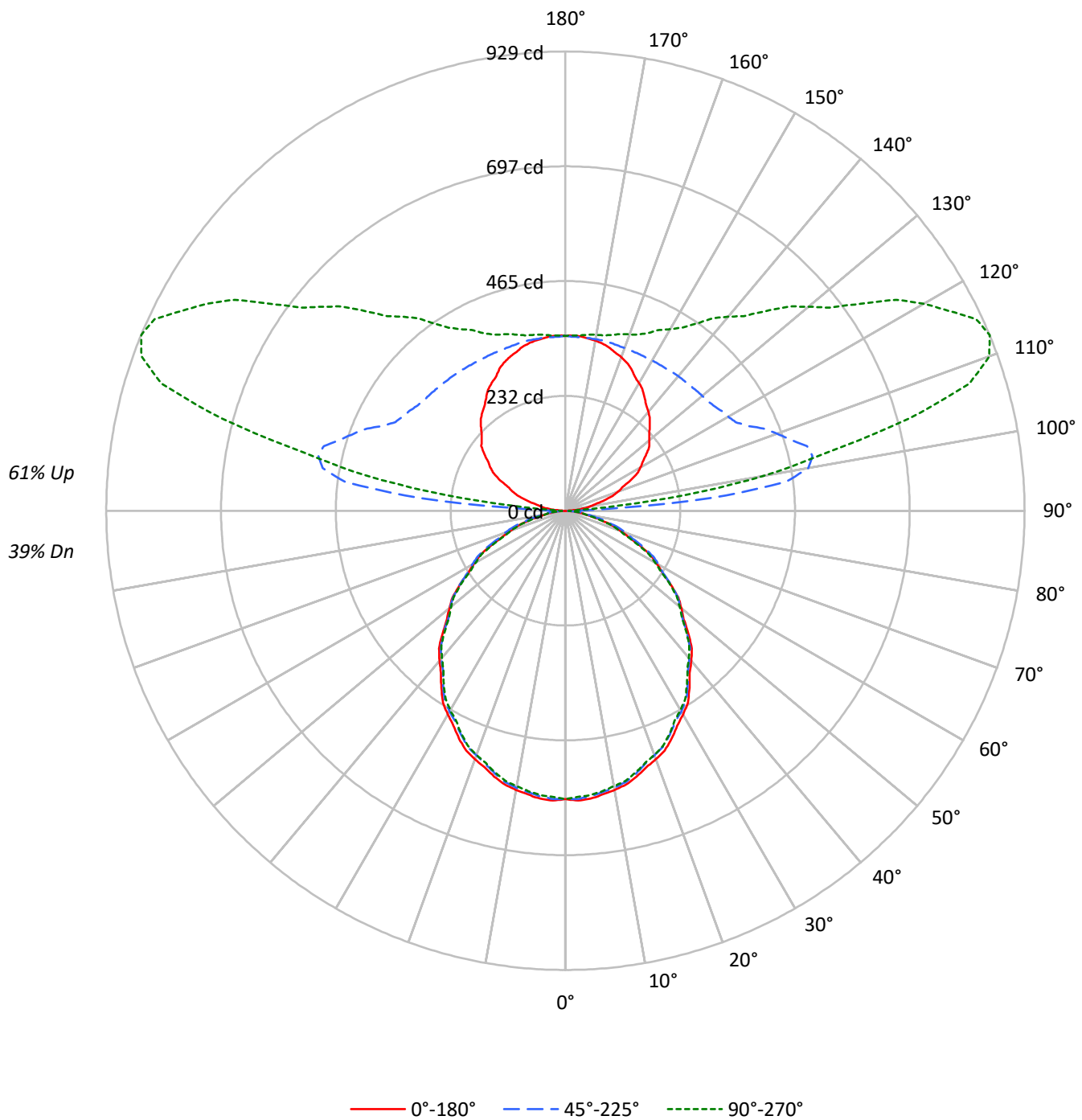
Lumens per Lamp: N/A
Luminaire Lumens: 3790.4 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 34.7
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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39
2	87	80	74	69	79	73	68	63	59	56	53	47	45	43	36	34	33
3	79	70	63	57	72	64	58	53	52	48	44	42	39	36	32	30	28
4	73	62	54	48	66	57	50	45	47	42	38	37	34	31	29	26	24
5	67	55	47	41	60	50	44	38	42	36	32	33	30	27	26	23	21
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	21	19
7	57	45	37	31	51	41	34	29	34	29	25	27	24	21	21	19	17
8	52	40	33	28	48	37	30	26	31	26	22	25	21	18	20	17	15
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5383	5383	5383
5°	5417	5374	5350
10°	5374	5331	5302
15°	5317	5258	5238
20°	5254	5173	5162
25°	5181	5086	5071
30°	5071	4994	4961
35°	4926	4858	4828
40°	4773	4698	4680
45°	4588	4528	4507
50°	4396	4361	4330
55°	4192	4192	4126
60°	3936	4012	3869
65°	3602	3781	3513
70°	3175	3480	3091
75°	2713	3116	2638
80°	2104	2619	2131
85°	1366	2011	1800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4588 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	1.4
10°-20°	155.1	4.1
20°-30°	230.1	6.1
30°-40°	269.2	7.1
40°-50°	268.0	7.1
50°-60°	231.4	6.1
60°-70°	166.6	4.4
70°-80°	87.4	2.3
80°-90°	22.6	0.6
90°-100°	166.9	4.4
100°-110°	459.2	12.1
110°-120°	473.9	12.5
120°-130°	379.7	10.0
130°-140°	298.2	7.9
140°-150°	228.6	6.0
150°-160°	164.3	4.3
160°-170°	100.5	2.7
170°-180°	33.9	0.9
0°-30°	440.1	11.6
0°-40°	709.3	18.7
0°-60°	1208.7	31.9
0°-90°	1485.2	39.2
90°-120°	1100.0	29.0
90°-150°	2006.5	52.9
90°-180°	2305.0	60.8
0°-180°	3790.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	585	578	580	579	578	55
15°	557	550	550	549	548	157
25°	509	500	500	497	498	234
35°	437	431	431	427	429	273
45°	352	349	347	346	345	271
55°	261	260	261	257	256	232
65°	165	170	173	166	161	164
75°	76	83	87	82	74	82
85°	13	17	19	18	17	17
90°	1	3	5	7	7	2
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	583.4	583.4	583.4	583.4	583.4
2.5°	586.7	581.9	583.4	582.1	579.3
5°	584.9	578.4	580.3	578.7	577.7
7.5°	579.0	572.9	574.4	572.7	572.1
10°	573.6	567.6	569.0	566.9	565.9
12.5°	567.5	561.0	562.4	560.4	559.8
15°	556.7	549.6	550.5	549.4	548.4
17.5°	544.1	537.0	537.1	535.5	535.3
20°	535.1	527.5	526.9	524.8	525.8
22.5°	525.2	517.3	516.6	513.7	515.1
25°	508.9	500.3	499.6	496.6	498.1
27.5°	490.0	481.5	481.5	477.2	478.8
30°	476.0	467.9	468.8	463.7	465.7
32.5°	461.2	453.9	454.4	449.3	451.3
35°	437.4	431.4	431.3	427.2	428.7
37.5°	413.2	407.8	407.0	404.6	405.0
40°	396.3	391.8	390.1	388.6	388.6
42.5°	378.6	374.5	372.9	371.7	371.3
45°	351.6	348.6	347.0	345.9	345.4
47.5°	324.9	322.0	320.6	319.9	319.4
50°	306.3	304.3	303.8	302.2	301.7
52.5°	287.8	286.6	286.1	284.1	283.6
55°	260.6	260.1	260.6	257.0	256.5
57.5°	232.2	233.0	234.7	229.8	228.6
60°	213.3	215.3	217.4	211.7	209.7
62.5°	194.0	197.2	200.2	193.6	190.8
65°	165.0	170.0	173.2	166.4	160.9
67.5°	137.0	143.3	147.1	139.8	133.5
70°	117.7	124.7	129.0	121.7	114.6
72.5°	100.8	108.7	112.2	105.2	98.2
75°	76.1	83.1	87.4	81.6	74.0
77.5°	54.0	60.6	64.1	59.1	52.8
80°	39.6	46.6	49.3	45.1	40.1
82.5°	28.1	33.9	35.8	33.2	29.8
85°	12.9	16.9	19.0	18.0	17.0
87.5°	3.4	6.7	8.9	9.2	9.6
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-075U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)