

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-PR1-100U-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 (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

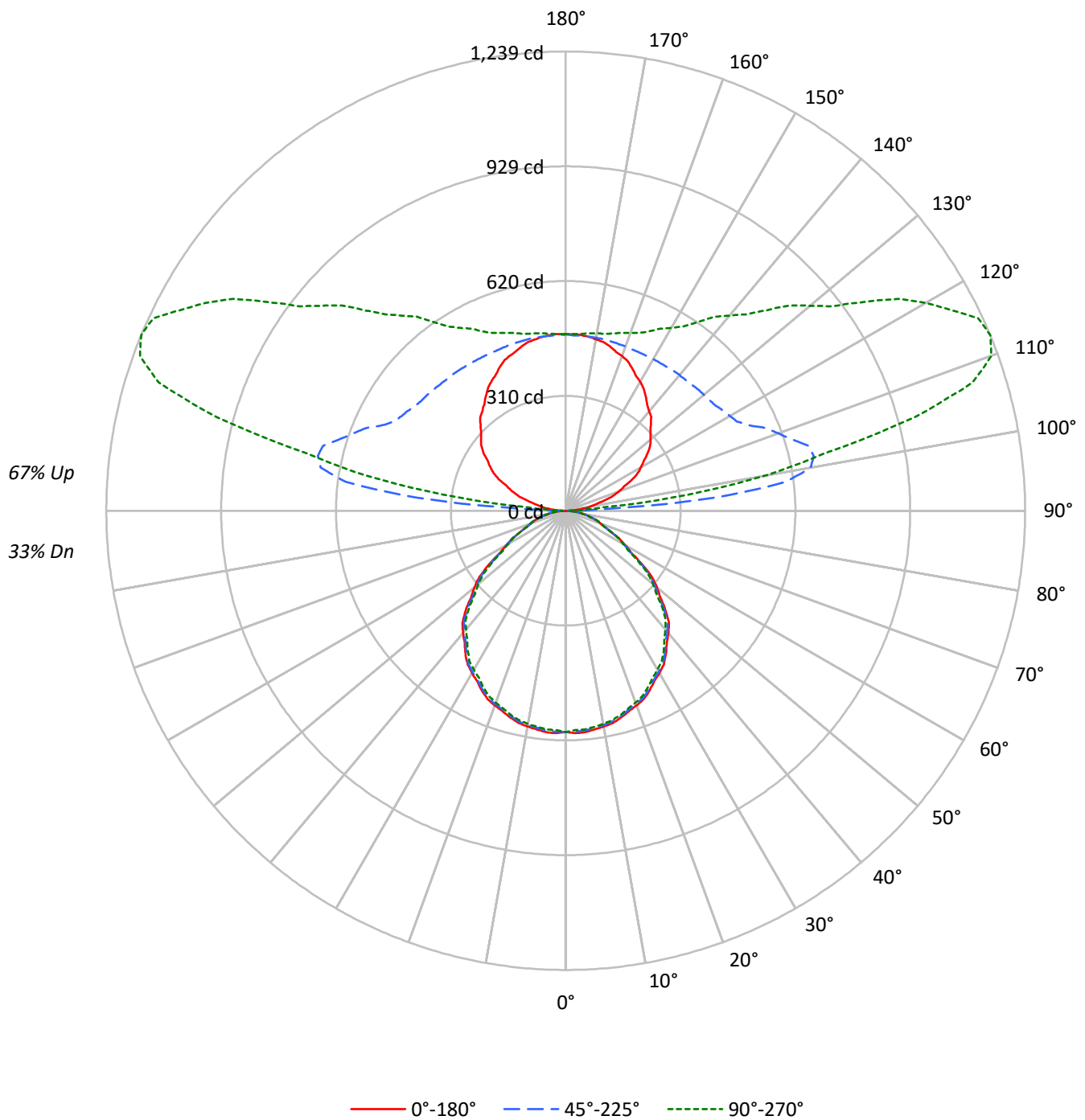
Lumens per Lamp: N/A
Luminaire Lumens: 4585.6 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5507	5507	5507
5°	5556	5513	5485
10°	5539	5500	5471
15°	5514	5480	5450
20°	5486	5451	5411
25°	5448	5412	5349
30°	5390	5351	5275
35°	5309	5263	5188
40°	5189	5133	5040
45°	4978	4890	4790
50°	4605	4494	4405
55°	4018	3928	3846
60°	3386	3358	3292
65°	2930	2941	2919
70°	2689	2703	2703
75°	2584	2584	2602
80°	2433	2460	2433
85°	1958	2181	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4978 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	1.2
10°-20°	161.5	3.5
20°-30°	243.6	5.3
30°-40°	290.2	6.3
40°-50°	286.1	6.2
50°-60°	218.7	4.8
60°-70°	135.3	3.0
70°-80°	76.9	1.7
80°-90°	24.4	0.5
90°-100°	222.9	4.9
100°-110°	615.3	13.4
110°-120°	634.6	13.8
120°-130°	510.0	11.1
130°-140°	400.8	8.7
140°-150°	307.4	6.7
150°-160°	220.9	4.8
160°-170°	135.1	2.9
170°-180°	45.5	1.0
0°-30°	461.5	10.1
0°-40°	751.7	16.4
0°-60°	1256.5	27.4
0°-90°	1493.1	32.6
90°-120°	1472.8	32.1
90°-150°	2691.0	58.7
90°-180°	3093.0	67.4
0°-180°	4585.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	600	593	595	593	592	57
15°	577	571	574	572	571	163
25°	535	529	532	526	525	246
35°	471	466	467	461	461	294
45°	382	376	375	368	367	292
55°	250	246	244	240	239	224
65°	134	133	135	134	134	136
75°	72	72	72	73	73	77
85°	18	20	21	21	21	22
90°	2	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.9	596.9	596.9	596.9	596.9
2.5°	600.6	595.3	596.9	595.6	592.7
5°	599.9	593.4	595.3	593.2	592.2
7.5°	595.3	588.9	590.8	588.7	588.1
10°	591.2	585.2	587.1	585.0	584.0
12.5°	586.7	580.2	582.6	580.1	579.1
15°	577.3	571.3	573.7	571.6	570.6
17.5°	567.0	560.6	563.0	560.6	559.3
20°	558.8	552.8	555.2	551.6	551.1
22.5°	549.8	543.7	546.2	541.3	541.2
25°	535.2	528.6	531.6	525.9	525.4
27.5°	517.8	511.8	514.2	508.4	507.8
30°	505.9	499.8	502.3	496.1	495.1
32.5°	492.3	486.7	488.7	482.5	481.9
35°	471.4	465.9	467.3	461.1	460.6
37.5°	447.7	442.6	443.5	436.7	436.2
40°	430.8	425.8	426.2	419.0	418.5
42.5°	412.3	407.3	406.8	399.6	399.1
45°	381.5	376.4	374.8	368.1	367.1
47.5°	346.3	341.3	338.2	332.7	332.0
50°	320.8	315.8	313.1	308.4	306.9
52.5°	293.2	288.2	285.9	281.7	280.2
55°	249.8	245.8	244.2	240.1	239.1
57.5°	208.6	205.9	205.4	201.4	201.0
60°	183.5	182.0	182.0	178.4	178.4
62.5°	162.1	161.0	161.8	159.5	159.1
65°	134.2	133.2	134.7	133.7	133.7
67.5°	112.1	112.1	113.0	112.6	112.6
70°	99.7	99.7	100.2	100.2	100.2
72.5°	88.6	88.2	89.6	89.5	89.1
75°	72.5	72.5	72.5	73.0	73.0
77.5°	56.4	56.5	57.0	56.8	56.4
80°	45.8	46.3	46.3	45.8	45.8
82.5°	35.1	35.6	35.6	35.5	35.1
85°	18.5	19.5	20.6	20.6	20.6
87.5°	5.7	7.6	9.4	9.6	9.3
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)