

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-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

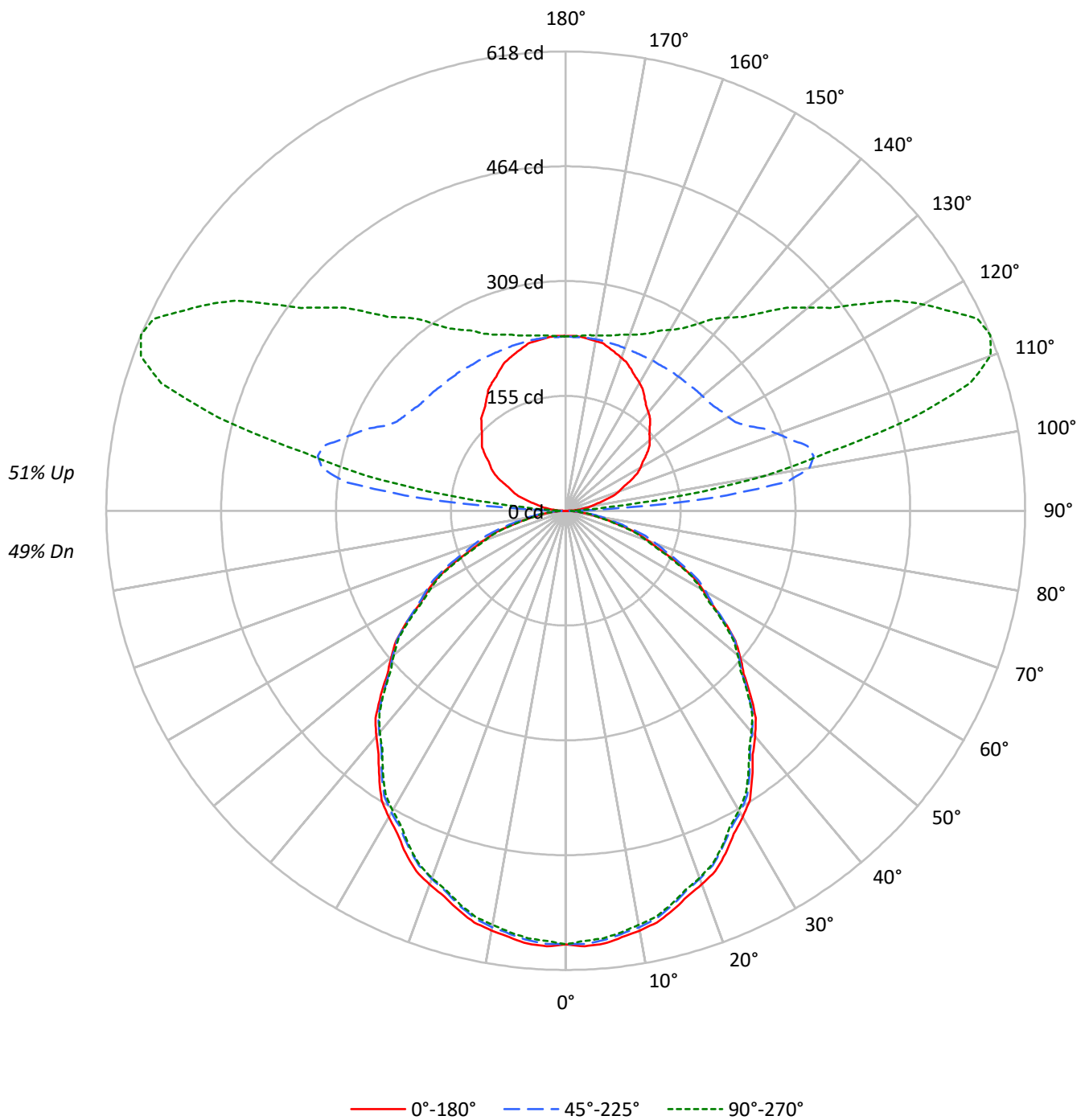
Lumens per Lamp: N/A
Luminaire Lumens: 3019.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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				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	99	99	99	99	83	83	83	69	69	69	55	55	55
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18
9	50	38	31	26	46	35	29	24	31	25	21	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°	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	1.8
10°-20°	155.1	5.1
20°-30°	230.1	7.6
30°-40°	269.2	8.9
40°-50°	268.0	8.9
50°-60°	231.4	7.7
60°-70°	166.6	5.5
70°-80°	87.4	2.9
80°-90°	22.6	0.7
90°-100°	112.8	3.7
100°-110°	306.3	10.1
110°-120°	315.0	10.4
120°-130°	251.8	8.3
130°-140°	197.9	6.6
140°-150°	151.7	5.0
150°-160°	109.1	3.6
160°-170°	66.7	2.2
170°-180°	22.5	0.7
0°-30°	440.1	14.6
0°-40°	709.3	23.5
0°-60°	1208.7	40.0
0°-90°	1485.2	49.2
90°-120°	734.1	24.3
90°-150°	1335.5	44.2
90°-180°	1534.0	50.8
0°-180°	3019.0	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°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)