

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-PC3-050U-100D-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-PC3-050U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

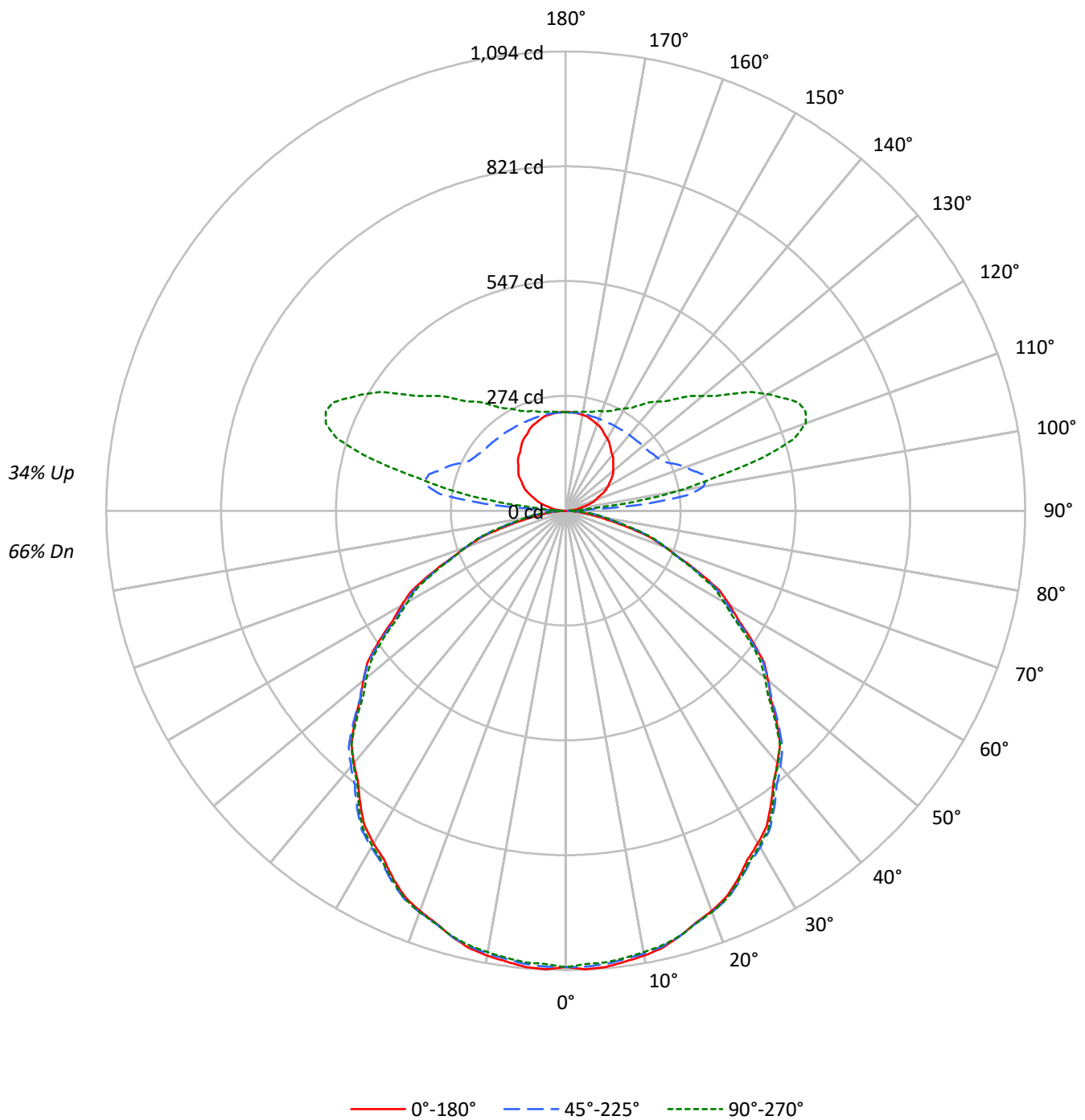
Lumens per Lamp: N/A
Luminaire Lumens: 4501.8 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71
1	101	97	93	90	95	91	88	85	81	78	76	72	70	68	63	61	60
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	55	53	51
3	84	75	67	61	79	70	64	58	63	57	53	56	51	48	49	46	43
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	44	40	37
5	71	59	50	44	66	56	48	42	50	44	39	44	39	36	39	35	32
6	65	53	44	38	61	50	43	37	45	39	34	40	35	31	36	32	28
7	60	48	40	34	57	45	38	33	41	35	30	37	31	28	32	28	25
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20
10	49	36	29	24	46	35	28	23	32	26	22	28	23	20	26	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10030	10030	10030
5°	10106	10040	10003
10°	10081	10034	10006
15°	10028	10028	10019
20°	9963	9992	9992
25°	9868	9940	9909
30°	9748	9866	9824
35°	9603	9750	9683
40°	9445	9577	9481
45°	9273	9338	9193
50°	9030	9030	8886
55°	8744	8630	8501
60°	8322	8154	8025
65°	7691	7538	7471
70°	6733	6790	6760
75°	5418	5992	6028
80°	3852	5079	5133
85°	2339	4266	4266

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9338 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	2.3
10°-20°	295.3	6.6
20°-30°	447.1	9.9
30°-40°	536.0	11.9
40°-50°	546.6	12.1
50°-60°	477.1	10.6
60°-70°	341.6	7.6
70°-80°	175.9	3.9
80°-90°	45.4	1.0
90°-100°	112.8	2.5
100°-110°	306.3	6.8
110°-120°	315.0	7.0
120°-130°	251.8	5.6
130°-140°	197.9	4.4
140°-150°	151.7	3.4
150°-160°	109.1	2.4
160°-170°	66.7	1.5
170°-180°	22.5	0.5
0°-30°	845.3	18.8
0°-40°	1381.3	30.7
0°-60°	2405.0	53.4
0°-90°	2967.9	65.9
90°-120°	734.1	16.3
90°-150°	1335.5	29.7
90°-180°	1534.0	34.1
0°-180°	4501.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1091	1080	1084	1081	1080	104
15°	1050	1041	1050	1050	1049	296
25°	969	962	976	973	973	446
35°	853	851	866	860	860	533
45°	711	709	716	707	705	547
55°	544	537	536	528	528	485
65°	352	344	345	342	342	348
75°	152	159	168	169	169	164
85°	22	34	40	41	40	30
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°	1087.1	1087.1	1087.1	1087.1	1087.1
2.5°	1093.6	1084.1	1087.1	1084.6	1080.7
5°	1091.2	1080.3	1084.1	1081.1	1080.1
7.5°	1083.3	1072.5	1077.5	1075.4	1074.5
10°	1076.1	1065.2	1071.0	1069.0	1068.0
12.5°	1066.4	1056.4	1063.0	1061.0	1060.8
15°	1049.9	1041.0	1049.9	1049.9	1048.9
17.5°	1029.2	1021.1	1030.6	1031.2	1030.6
20°	1014.7	1005.8	1017.7	1016.7	1017.7
22.5°	997.0	989.7	1002.4	999.8	1000.8
25°	969.4	962.5	976.4	973.4	973.4
27.5°	936.8	931.8	947.0	943.8	943.8
30°	915.0	910.1	926.1	922.1	922.1
32.5°	890.9	887.5	902.7	897.9	897.9
35°	852.6	850.6	865.7	859.7	859.7
37.5°	813.1	811.4	825.0	817.7	815.4
40°	784.2	783.2	795.2	787.2	787.2
42.5°	755.2	754.2	764.6	755.0	755.0
45°	710.7	708.7	715.7	706.6	704.6
47.5°	662.2	660.2	664.6	654.7	653.7
50°	629.1	627.2	629.1	620.1	619.1
52.5°	595.3	591.8	592.1	583.0	582.8
55°	543.6	536.7	536.5	528.5	528.5
57.5°	488.8	479.8	480.6	473.7	472.7
60°	451.0	441.1	441.9	435.8	434.9
62.5°	413.9	402.5	404.9	398.0	397.8
65°	352.3	344.4	345.3	342.2	342.2
67.5°	293.1	285.8	291.1	288.7	288.5
70°	249.6	244.7	251.7	251.6	250.6
72.5°	209.4	209.2	217.8	217.8	218.4
75°	152.0	158.9	168.1	169.1	169.1
77.5°	101.5	113.7	123.8	124.2	124.0
80°	72.5	86.3	95.6	97.6	96.6
82.5°	49.1	63.7	71.5	73.5	72.5
85°	22.1	34.0	40.3	41.2	40.3
87.5°	6.6	14.1	17.2	17.4	15.9
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)