

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-PC3-150U-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-150U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

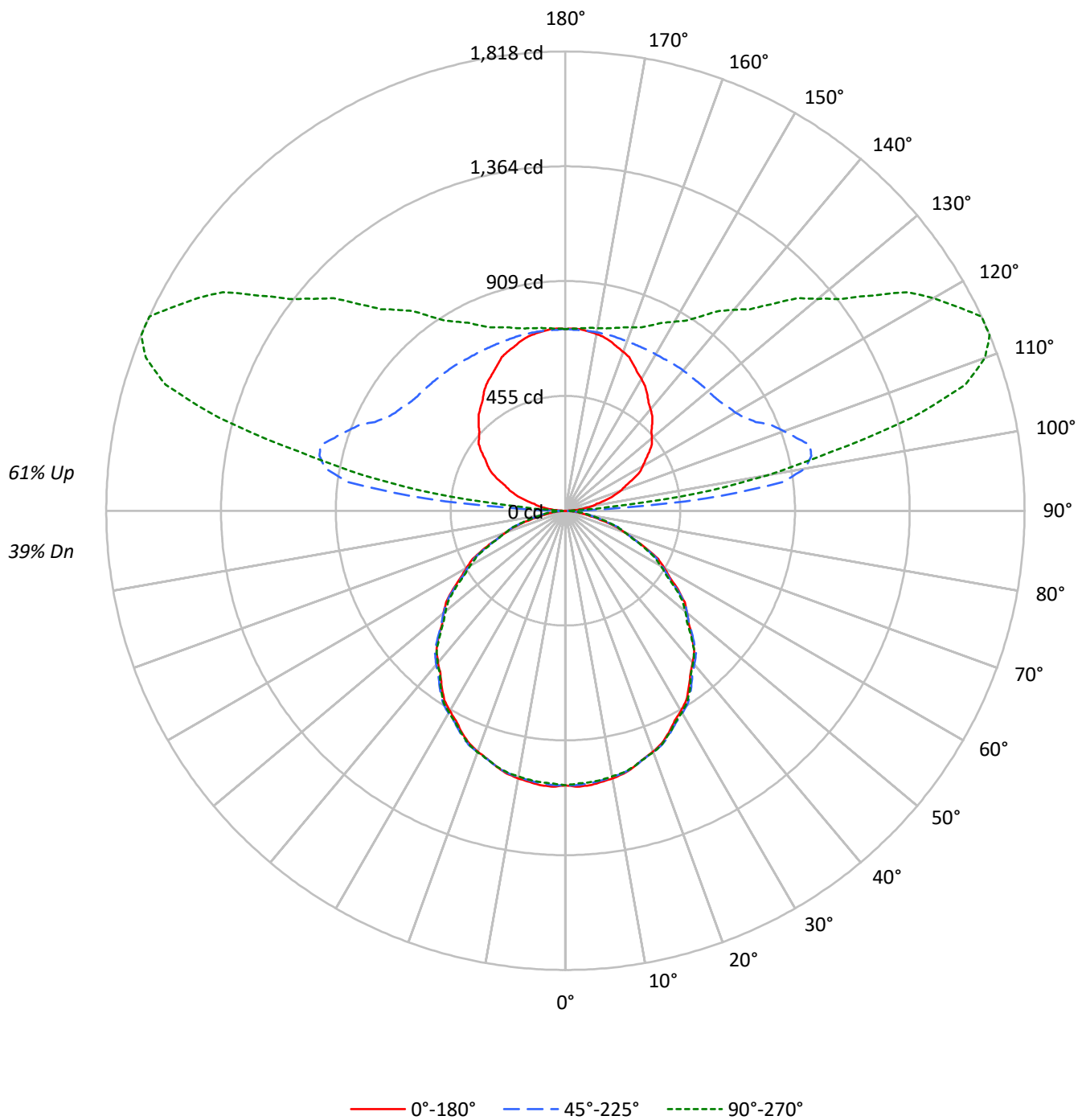
Lumens per Lamp: N/A
Luminaire Lumens: 7607.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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				10
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	65	63	54	52	51	41	40	39
2	87	80	74	69	79	73	67	63	59	56	52	47	45	42	36	34	33
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12

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	1.4
10°-20°	295.3	3.9
20°-30°	447.1	5.9
30°-40°	536.0	7.0
40°-50°	546.6	7.2
50°-60°	477.1	6.3
60°-70°	341.6	4.5
70°-80°	175.9	2.3
80°-90°	46.0	0.6
90°-100°	334.3	4.4
100°-110°	904.0	11.9
110°-120°	950.4	12.5
120°-130°	772.0	10.1
130°-140°	605.6	8.0
140°-150°	464.8	6.1
150°-160°	334.3	4.4
160°-170°	204.2	2.7
170°-180°	68.8	0.9
0°-30°	845.3	11.1
0°-40°	1381.3	18.2
0°-60°	2405.0	31.6
0°-90°	2968.5	39.0
90°-120°	2188.8	28.8
90°-150°	4031.1	53.0
90°-180°	4638.0	61.0
0°-180°	7607.0	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°	2	5	10	11	10	4
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

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°	6.8	14.4	18.1	18.2	16.5
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-150U-100D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)