

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-PW1-100U-125D-927-1D-UNV-STD-W-6

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-PW1-100U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

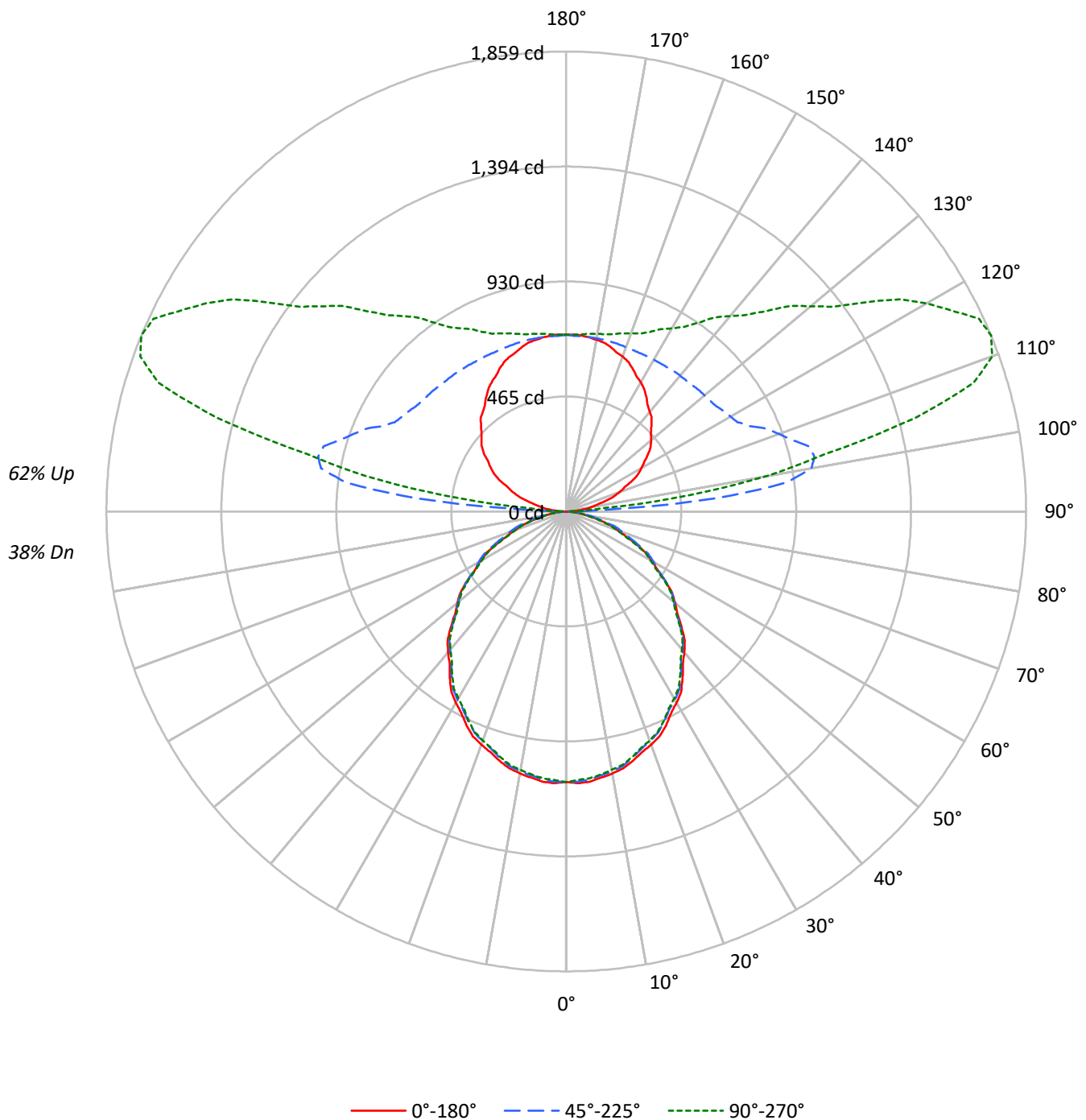
Lumens per Lamp: N/A
Luminaire Lumens: 7422.4 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 107.3
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	91	87	84	86	83	79	76	67	65	63	53	51	50	40	39	38
2	87	79	73	68	78	72	67	63	59	55	52	46	44	42	35	33	32
3	79	70	63	57	71	64	57	52	52	47	44	41	38	35	31	29	27
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	25	23
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	37	31	51	41	34	29	33	28	24	27	23	20	21	18	16
8	52	40	33	27	47	37	30	25	30	25	22	25	21	18	19	16	14
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	17	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°	6726	6726	6726
5°	6769	6716	6686
10°	6715	6661	6625
15°	6644	6570	6546
20°	6565	6464	6451
25°	6473	6355	6336
30°	6336	6240	6200
35°	6156	6069	6033
40°	5964	5871	5848
45°	5732	5657	5631
50°	5494	5449	5411
55°	5238	5238	5155
60°	4918	5013	4836
65°	4502	4726	4389
70°	3967	4348	3863
75°	3389	3893	3296
80°	2628	3276	2660
85°	1701	2512	2244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5732 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	1.4
10°-20°	290.7	3.9
20°-30°	431.2	5.8
30°-40°	504.6	6.8
40°-50°	502.3	6.8
50°-60°	433.8	5.8
60°-70°	312.2	4.2
70°-80°	163.7	2.2
80°-90°	42.1	0.6
90°-100°	334.3	4.5
100°-110°	923.0	12.4
110°-120°	951.9	12.8
120°-130°	765.0	10.3
130°-140°	601.2	8.1
140°-150°	461.1	6.2
150°-160°	331.4	4.5
160°-170°	202.6	2.7
170°-180°	68.3	0.9
0°-30°	824.9	11.1
0°-40°	1329.5	17.9
0°-60°	2265.5	30.5
0°-90°	2783.6	37.5
90°-120°	2209.3	29.8
90°-150°	4036.5	54.4
90°-180°	4639.0	62.5
0°-180°	7422.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1096	1084	1088	1085	1083	104
15°	1043	1030	1032	1030	1028	294
25°	954	938	936	931	934	439
35°	820	809	808	801	804	513
45°	659	653	650	648	647	508
55°	488	488	488	482	481	436
65°	309	319	325	312	302	306
75°	143	156	164	153	139	153
85°	24	32	36	34	32	32
90°	2	4	9	10	11	4
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.5	1093.5	1093.5	1093.5	1093.5
2.5°	1099.6	1090.6	1093.5	1091.0	1085.8
5°	1096.4	1084.1	1087.7	1084.8	1082.9
7.5°	1085.2	1073.9	1076.5	1073.4	1072.3
10°	1075.2	1063.9	1066.5	1062.6	1060.7
12.5°	1063.6	1051.6	1054.2	1050.3	1049.2
15°	1043.4	1030.2	1031.8	1029.9	1028.0
17.5°	1019.9	1006.5	1006.8	1003.7	1003.3
20°	1002.9	988.8	987.5	983.7	985.6
22.5°	984.4	969.5	968.2	962.9	965.5
25°	953.8	937.8	936.4	930.7	933.6
27.5°	918.3	902.5	902.5	894.5	897.5
30°	892.1	877.1	878.6	869.1	872.9
32.5°	864.4	850.8	851.7	842.1	845.9
35°	819.9	808.6	808.3	800.7	803.5
37.5°	774.4	764.4	762.8	758.4	759.2
40°	742.8	734.3	731.2	728.3	728.3
42.5°	709.7	701.9	698.9	696.7	696.0
45°	659.0	653.3	650.3	648.4	647.4
47.5°	608.9	603.6	601.0	599.6	598.7
50°	574.2	570.4	569.4	566.5	565.5
52.5°	539.5	537.3	536.2	532.6	531.6
55°	488.5	487.5	488.5	481.7	480.7
57.5°	435.3	436.8	439.9	430.8	428.5
60°	399.8	403.6	407.5	396.8	393.1
62.5°	363.6	369.6	375.2	362.9	357.6
65°	309.3	318.7	324.7	311.9	301.6
67.5°	256.8	268.5	275.7	262.0	250.3
70°	220.6	233.8	241.8	228.0	214.8
72.5°	189.0	203.7	210.2	197.2	184.0
75°	142.6	155.8	163.8	152.9	138.7
77.5°	101.2	113.6	120.2	110.7	99.0
80°	74.2	87.4	92.5	84.6	75.1
82.5°	52.6	63.5	67.1	62.3	55.9
85°	24.1	31.6	35.6	33.7	31.8
87.5°	6.6	12.3	16.5	16.7	17.7
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)