

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-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-PW1-100U-125D-927-1D-UNV-STD-W-4
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

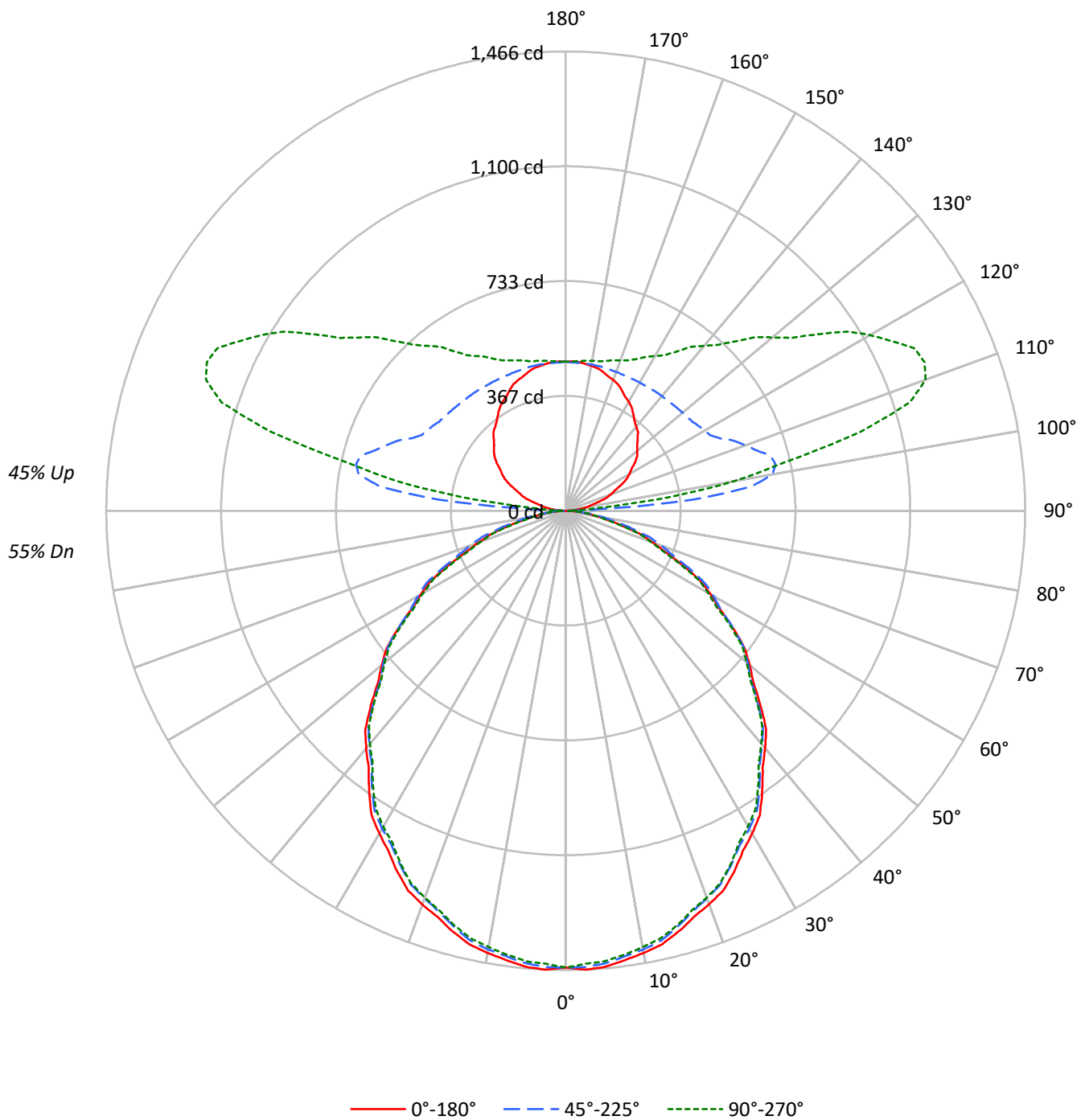
Lumens per Lamp: N/A
Luminaire Lumens: 6803.0 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	53	52	51
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13452	13452	13452
5°	13538	13432	13372
10°	13431	13322	13250
15°	13288	13141	13092
20°	13129	12928	12902
25°	12946	12711	12671
30°	12672	12481	12399
35°	12313	12138	12066
40°	11928	11743	11696
45°	11464	11314	11263
50°	10989	10897	10822
55°	10476	10476	10311
60°	9837	10027	9671
65°	9001	9451	8778
70°	7936	8697	7729
75°	6777	7785	6595
80°	5255	6551	5324
85°	3398	5028	4488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11464 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.3	2.0
10°-20°	387.6	5.7
20°-30°	575.0	8.5
30°-40°	672.8	9.9
40°-50°	669.8	9.8
50°-60°	578.4	8.5
60°-70°	416.3	6.1
70°-80°	218.3	3.2
80°-90°	55.1	0.8
90°-100°	222.9	3.3
100°-110°	615.3	9.0
110°-120°	634.6	9.3
120°-130°	510.0	7.5
130°-140°	400.8	5.9
140°-150°	307.4	4.5
150°-160°	220.9	3.2
160°-170°	135.1	2.0
170°-180°	45.5	0.7
0°-30°	1099.9	16.2
0°-40°	1772.6	26.1
0°-60°	3020.7	44.4
0°-90°	3710.5	54.5
90°-120°	1472.8	21.6
90°-150°	2691.0	39.6
90°-180°	3093.0	45.5
0°-180°	6803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1462	1446	1450	1446	1444	138
15°	1391	1374	1376	1373	1371	392
25°	1272	1250	1249	1241	1245	585
35°	1093	1078	1078	1068	1071	683
45°	879	871	867	864	863	678
55°	651	650	651	642	641	581
65°	412	425	433	416	402	409
75°	190	208	218	204	185	204
85°	32	42	48	45	42	42
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:

CATALOG NUMBER: SQ4-PW1-100U-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1458.0	1458.0	1458.0	1458.0	1458.0
2.5°	1466.2	1454.1	1458.0	1454.7	1447.7
5°	1461.8	1445.5	1450.3	1446.4	1443.8
7.5°	1446.9	1431.9	1435.4	1431.2	1429.7
10°	1433.6	1418.5	1422.0	1416.8	1414.3
12.5°	1418.2	1402.1	1405.6	1400.4	1398.9
15°	1391.2	1373.6	1375.8	1373.1	1370.6
17.5°	1359.8	1342.0	1342.4	1338.2	1337.7
20°	1337.2	1318.4	1316.7	1311.6	1314.1
22.5°	1312.6	1292.7	1291.0	1283.9	1287.4
25°	1271.7	1250.4	1248.6	1241.0	1244.7
27.5°	1224.4	1203.3	1203.4	1192.7	1196.7
30°	1189.5	1169.4	1171.5	1158.8	1163.8
32.5°	1152.5	1134.4	1135.6	1122.8	1127.8
35°	1093.2	1078.1	1077.7	1067.6	1071.3
37.5°	1032.5	1019.2	1017.1	1011.2	1012.2
40°	990.4	979.1	975.0	971.1	971.1
42.5°	946.2	935.9	931.8	929.0	928.0
45°	878.6	871.1	867.1	864.5	863.2
47.5°	811.8	804.8	801.3	799.5	798.2
50°	765.6	760.6	759.2	755.3	754.0
52.5°	719.4	716.3	715.0	710.1	708.8
55°	651.3	650.0	651.3	642.3	641.0
57.5°	580.4	582.4	586.5	574.4	571.4
60°	533.1	538.1	543.4	529.1	524.1
62.5°	484.8	492.8	500.2	483.9	476.8
65°	412.3	424.9	432.9	415.9	402.1
67.5°	342.5	358.0	367.6	349.3	333.7
70°	294.2	311.7	322.4	304.0	286.5
72.5°	252.0	271.6	280.3	262.9	245.4
75°	190.1	207.7	218.4	203.8	185.0
77.5°	134.9	151.5	160.3	147.6	132.1
80°	98.9	116.5	123.3	112.8	100.2
82.5°	70.1	84.7	89.4	83.0	74.5
85°	32.1	42.2	47.5	44.9	42.4
87.5°	8.5	15.9	20.7	20.9	22.1
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)