

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-BB-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-BB-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

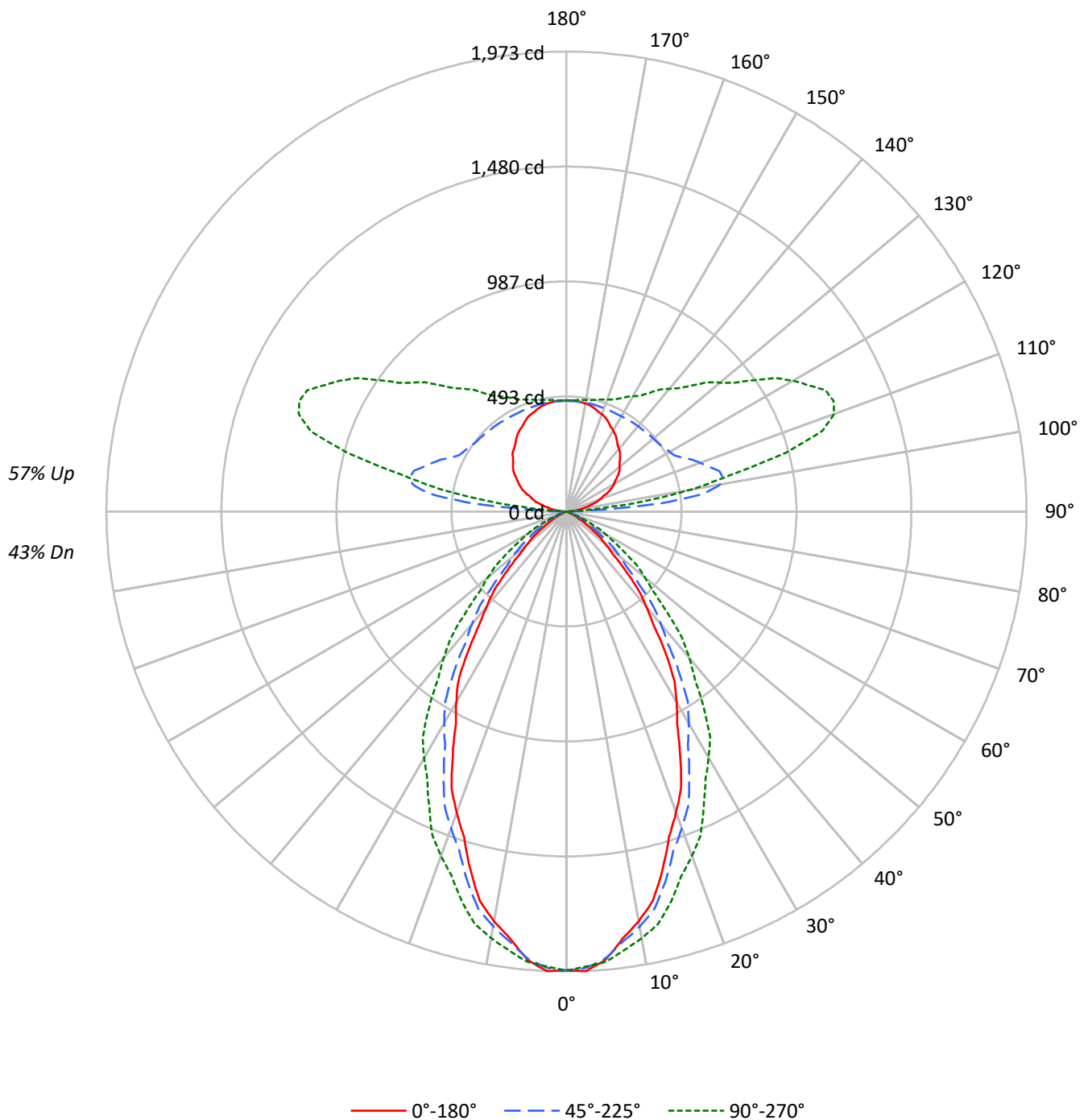
Lumens per Lamp: N/A
Luminaire Lumens: 5442.0 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36
4	77	68	61	56	71	63	57	52	53	49	45	45	41	39	36	34	33
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27
7	62	51	44	39	57	47	41	37	41	36	33	35	31	29	29	27	25
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	25	23
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18164	18164	18164
5°	17871	17827	17959
10°	16721	16945	17417
15°	15201	15684	16557
20°	13494	14195	15439
25°	11751	12682	14185
30°	10065	11171	12998
35°	8346	9482	11564
40°	6412	7583	9853
45°	4636	5741	7928
50°	3158	4279	6288
55°	2052	3095	4887
60°	1177	2179	3532
65°	312	1332	1788
70°	154	410	513
75°	68	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7928 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	3.3
10°-20°	459.5	8.4
20°-30°	575.2	10.6
30°-40°	531.3	9.8
40°-50°	357.0	6.6
50°-60°	184.4	3.4
60°-70°	57.7	1.1
70°-80°	3.7	0.1
80°-90°	1.1	0.0
90°-100°	222.9	4.1
100°-110°	615.3	11.3
110°-120°	634.6	11.7
120°-130°	510.0	9.4
130°-140°	400.8	7.4
140°-150°	307.4	5.6
150°-160°	220.9	4.1
160°-170°	135.1	2.5
170°-180°	45.5	0.8
0°-30°	1214.3	22.3
0°-40°	1745.6	32.1
0°-60°	2287.0	42.0
0°-90°	2349.4	43.2
90°-120°	1472.8	27.1
90°-150°	2691.0	49.4
90°-180°	3093.0	56.8
0°-180°	5442.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1969	1969	1969	1969	1969	
5°	1930	1910	1925	1932	1939	179
15°	1592	1586	1642	1697	1733	443
25°	1154	1164	1246	1331	1393	529
35°	741	760	842	941	1027	459
45°	355	377	440	526	608	279
55°	128	149	192	247	304	119
65°	14	27	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	3	6	7	8	2
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:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1968.7	1968.7	1968.7	1968.7	1968.7
2.5°	1973.2	1954.6	1959.5	1959.4	1954.2
5°	1929.6	1910.1	1924.9	1931.7	1939.1
7.5°	1848.1	1832.8	1861.2	1882.5	1898.0
10°	1784.8	1771.8	1808.7	1837.7	1859.1
12.5°	1711.7	1701.6	1746.2	1786.0	1813.4
15°	1591.5	1585.9	1642.0	1697.1	1733.4
17.5°	1462.7	1462.6	1526.6	1595.0	1638.7
20°	1374.4	1377.1	1445.8	1521.2	1572.5
22.5°	1286.0	1292.5	1365.8	1444.5	1503.1
25°	1154.3	1163.7	1245.8	1331.0	1393.4
27.5°	1027.9	1041.5	1127.9	1216.5	1292.4
30°	944.8	960.6	1048.6	1141.8	1220.1
32.5°	863.3	882.1	967.9	1066.4	1146.2
35°	741.0	759.6	841.9	941.0	1026.7
37.5°	614.7	632.9	713.4	810.9	903.5
40°	532.4	552.9	629.6	724.1	818.1
42.5°	457.7	478.2	550.3	643.2	732.0
45°	355.3	376.7	440.0	525.7	607.6
47.5°	270.3	293.6	349.2	426.7	501.4
50°	220.0	243.3	298.1	366.4	438.1
52.5°	179.6	202.2	251.6	316.0	381.7
55°	127.6	149.0	192.4	247.0	303.8
57.5°	88.2	106.6	145.5	191.1	235.6
60°	63.8	81.5	118.1	155.1	191.4
62.5°	42.5	58.7	94.5	122.8	147.2
65°	14.3	27.3	61.0	73.5	81.9
67.5°	7.2	8.7	32.0	33.8	36.6
70°	5.7	5.7	15.2	16.3	19.0
72.5°	4.2	4.2	6.1	7.8	8.4
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.6	1.2	1.4	1.5
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)