

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-125U-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 (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-125U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

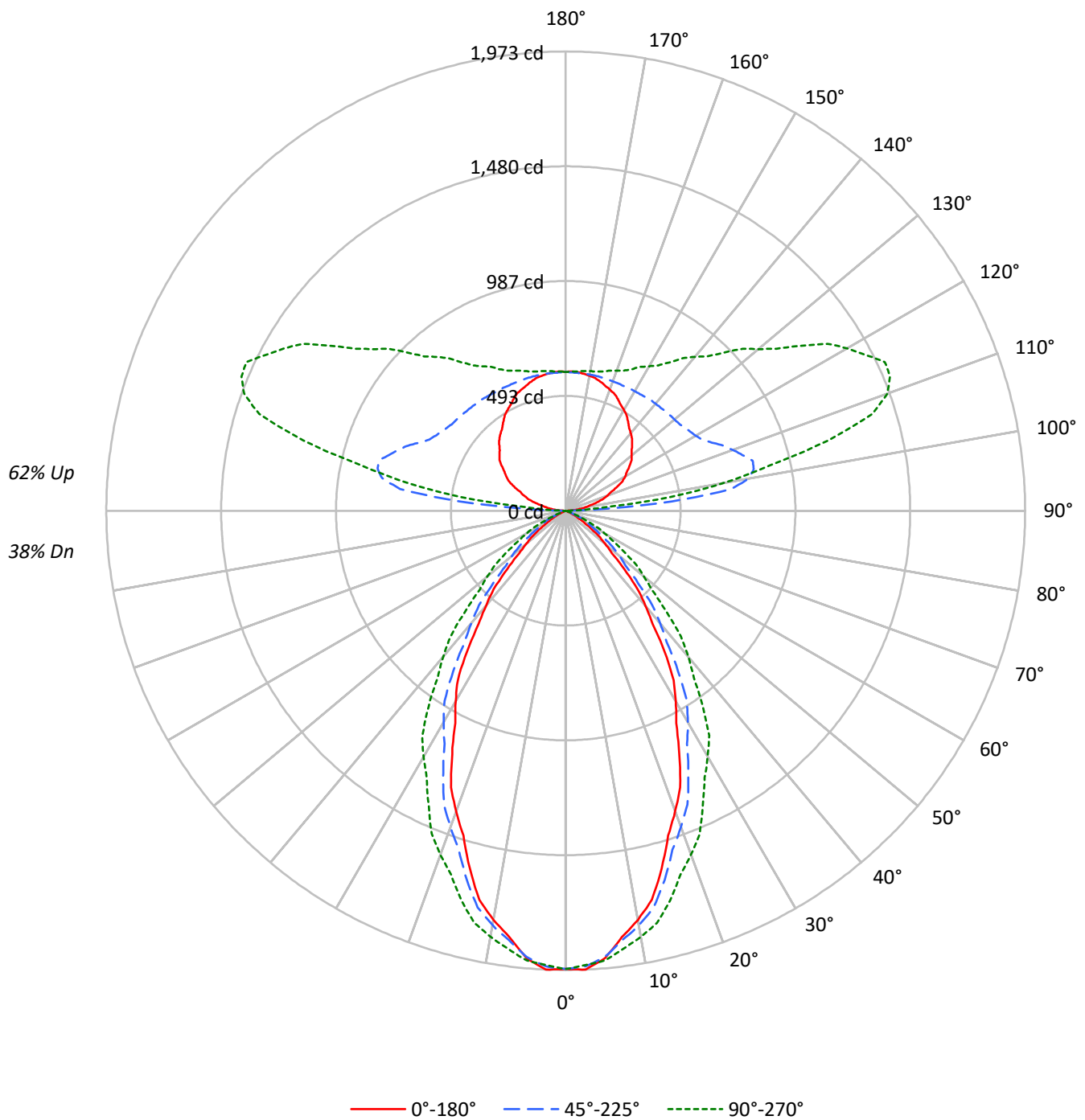
Lumens per Lamp: N/A
Luminaire Lumens: 6199.3 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 75.3
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	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38		
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35		
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31		
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28		
4	76	66	59	54	69	61	55	50	51	47	43	41	38	36	33	31	29	26		
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23		
6	65	54	47	42	59	50	44	39	42	37	34	35	32	29	28	26	24	21		
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19		
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18		
9	53	41	35	30	48	39	32	28	33	28	25	28	24	22	23	20	19	17		
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15		

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	2.9
10°-20°	459.5	7.4
20°-30°	575.2	9.3
30°-40°	531.3	8.6
40°-50°	357.0	5.8
50°-60°	184.4	3.0
60°-70°	57.7	0.9
70°-80°	3.7	0.1
80°-90°	1.5	0.0
90°-100°	278.9	4.5
100°-110°	751.4	12.1
110°-120°	788.6	12.7
120°-130°	639.9	10.3
130°-140°	501.9	8.1
140°-150°	385.3	6.2
150°-160°	277.0	4.5
160°-170°	169.3	2.7
170°-180°	57.1	0.9
0°-30°	1214.3	19.6
0°-40°	1745.6	28.2
0°-60°	2287.0	36.9
0°-90°	2349.9	37.9
90°-120°	1819.0	29.3
90°-150°	3346.1	54.0
90°-180°	3849.0	62.1
0°-180°	6199.3	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	4	9	10	10	3
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

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	0.9	1.8	2.0	2.0
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)