

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-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

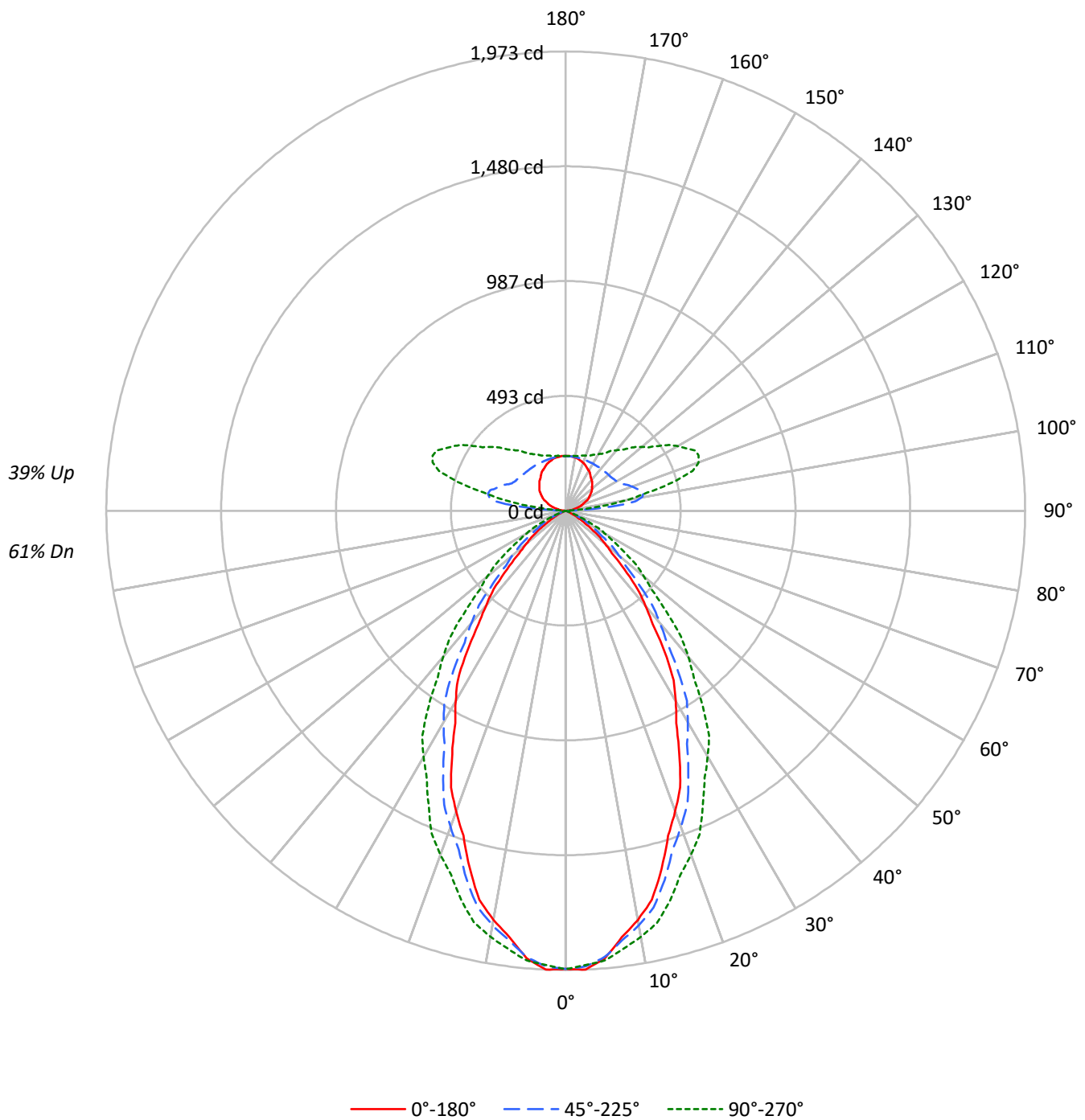
Lumens per Lamp: N/A
Luminaire Lumens: 3883.2 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26

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	4.6
10°-20°	459.5	11.8
20°-30°	575.2	14.8
30°-40°	531.3	13.7
40°-50°	357.0	9.2
50°-60°	184.4	4.7
60°-70°	57.7	1.5
70°-80°	3.7	0.1
80°-90°	1.0	0.0
90°-100°	112.8	2.9
100°-110°	306.3	7.9
110°-120°	315.0	8.1
120°-130°	251.8	6.5
130°-140°	197.9	5.1
140°-150°	151.7	3.9
150°-160°	109.1	2.8
160°-170°	66.7	1.7
170°-180°	22.5	0.6
0°-30°	1214.3	31.3
0°-40°	1745.6	45.0
0°-60°	2287.0	58.9
0°-90°	2349.4	60.5
90°-120°	734.1	18.9
90°-150°	1335.5	34.4
90°-180°	1534.0	39.5
0°-180°	3883.2	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°	1	3	5	7	7	1
95°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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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°	0.2	0.6	1.1	1.4	1.4
90°	0.8	3.0	5.3	6.8	6.8
92.5°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)