

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-075D-927-1D-UNV-STD-W-8

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-075D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

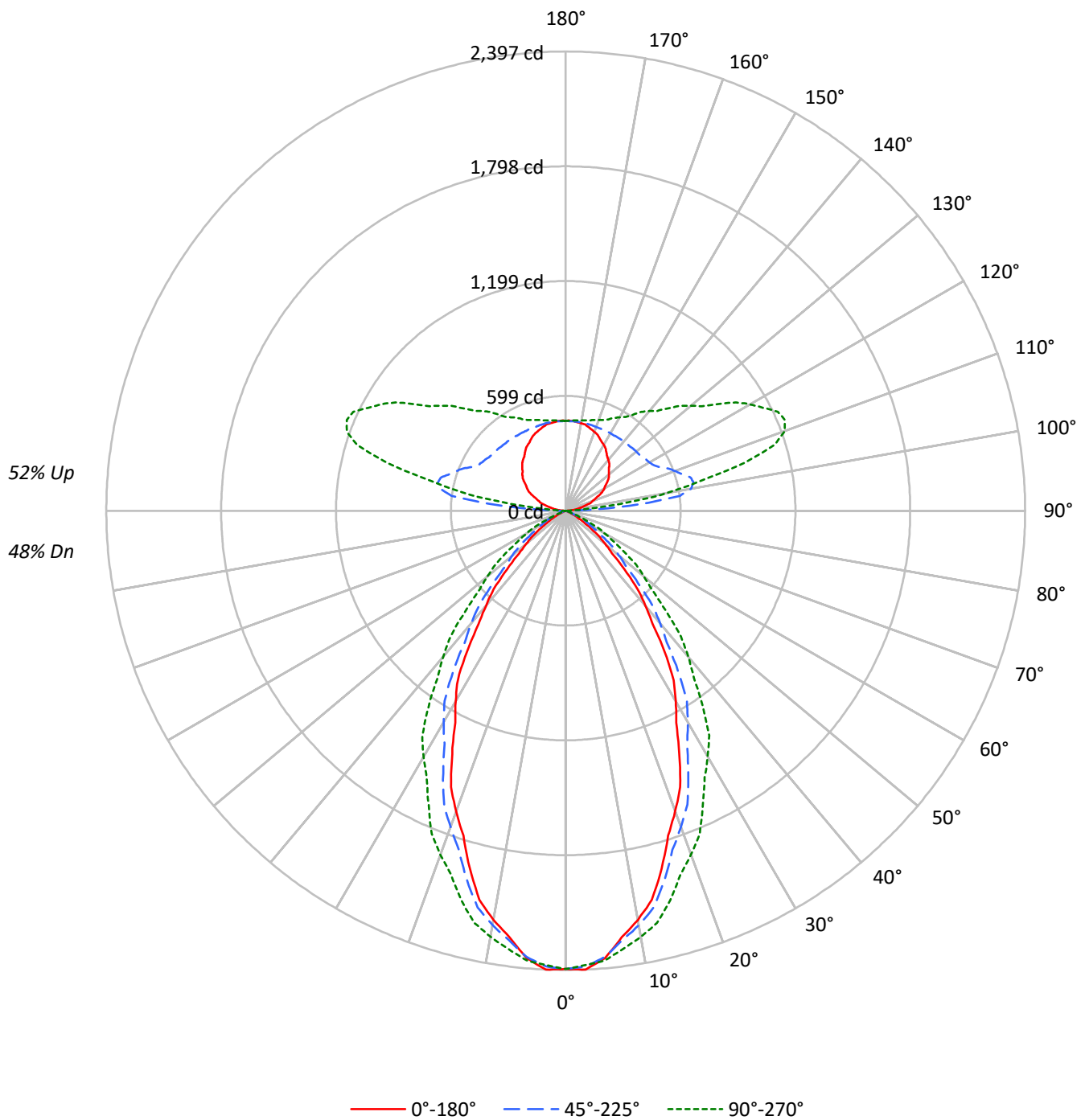
Lumens per Lamp: N/A
Luminaire Lumens: 5922.3 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11033	11033	11033
5°	10855	10828	10909
10°	10157	10292	10580
15°	9234	9526	10057
20°	8196	8622	9378
25°	7138	7703	8616
30°	6114	6786	7895
35°	5070	5760	7024
40°	3895	4606	5985
45°	2816	3488	4816
50°	1918	2599	3819
55°	1247	1880	2969
60°	715	1324	2146
65°	190	809	1086
70°	93	250	312
75°	41	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4816 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.3	3.7
10°-20°	558.2	9.4
20°-30°	698.8	11.8
30°-40°	645.4	10.9
40°-50°	433.7	7.3
50°-60°	224.0	3.8
60°-70°	70.2	1.2
70°-80°	4.4	0.1
80°-90°	1.9	0.0
90°-100°	225.5	3.8
100°-110°	612.7	10.3
110°-120°	629.9	10.6
120°-130°	503.6	8.5
130°-140°	395.7	6.7
140°-150°	303.4	5.1
150°-160°	218.2	3.7
160°-170°	133.5	2.3
170°-180°	45.0	0.8
0°-30°	1475.2	24.9
0°-40°	2120.6	35.8
0°-60°	2778.3	46.9
0°-90°	2854.8	48.2
90°-120°	1468.1	24.8
90°-150°	2670.9	45.1
90°-180°	3068.0	51.8
0°-180°	5922.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2392	2392	2392	2392	2392	
5°	2344	2320	2338	2347	2356	217
15°	1933	1927	1995	2062	2106	538
25°	1402	1414	1513	1617	1693	643
35°	900	923	1023	1143	1247	558
45°	432	458	535	639	738	339
55°	155	181	234	300	369	145
65°	17	33	74	89	100	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	11	14	14	2
95°	33	123	393	171	115	35
105°	109	169	674	1026	965	116
115°	193	235	539	1073	1222	191
125°	266	303	488	822	970	237
135°	320	356	474	670	755	248
145°	370	397	468	569	612	232
155°	418	433	465	511	526	193
165°	453	459	467	486	488	128
175°	470	471	468	474	473	45
180°	470	470	470	470	470	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2391.6	2391.6	2391.6	2391.6	2391.6
2.5°	2397.2	2374.5	2380.5	2380.4	2374.0
5°	2344.2	2320.4	2338.4	2346.7	2355.7
7.5°	2245.1	2226.6	2261.1	2287.0	2305.8
10°	2168.3	2152.5	2197.2	2232.5	2258.6
12.5°	2079.4	2067.2	2121.3	2169.8	2203.0
15°	1933.4	1926.6	1994.7	2061.7	2105.8
17.5°	1777.0	1776.8	1854.5	1937.6	1990.8
20°	1669.6	1673.0	1756.4	1848.1	1910.3
22.5°	1562.2	1570.2	1659.2	1754.8	1826.1
25°	1402.3	1413.7	1513.4	1617.0	1692.8
27.5°	1248.7	1265.2	1370.2	1477.8	1570.1
30°	1147.8	1167.0	1273.9	1387.1	1482.2
32.5°	1048.7	1071.6	1175.8	1295.5	1392.4
35°	900.2	922.8	1022.8	1143.2	1247.3
37.5°	746.8	768.9	866.6	985.1	1097.6
40°	646.8	671.7	764.8	879.6	993.9
42.5°	556.1	581.0	668.5	781.4	889.3
45°	431.6	457.6	534.6	638.6	738.2
47.5°	328.4	356.7	424.2	518.3	609.1
50°	267.3	295.6	362.2	445.1	532.2
52.5°	218.2	245.6	305.7	383.9	463.7
55°	155.0	181.1	233.7	300.1	369.1
57.5°	107.1	129.5	176.8	232.2	286.3
60°	77.5	99.0	143.5	188.4	232.6
62.5°	51.6	71.3	114.8	149.2	178.9
65°	17.4	33.2	74.1	89.3	99.5
67.5°	8.8	10.6	38.9	41.0	44.4
70°	6.9	6.9	18.5	19.7	23.1
72.5°	5.1	5.1	7.4	9.5	10.2
75°	2.3	2.3	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	0.0	0.0
80°	1.2	1.2	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	1.2	2.1	2.7	2.7
90°	1.5	5.9	10.6	13.6	13.6
92.5°	13.6	61.7	107.3	46.1	39.0
95°	33.2	123.3	392.8	170.9	114.8
97.5°	55.0	136.2	602.1	468.5	329.0
100°	69.5	144.8	666.2	675.3	545.3
102.5°	84.0	153.4	683.1	835.2	720.6
105°	108.8	169.3	673.8	1025.9	965.3
107.5°	134.4	187.9	634.8	1124.3	1141.1
110°	152.6	201.3	605.8	1143.7	1216.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.3	214.7	576.8	1127.6	1236.6
115°	193.4	234.7	539.3	1072.9	1222.1
117.5°	216.9	256.5	515.4	995.4	1163.5
120°	232.6	271.0	504.6	943.4	1110.3
122.5°	245.9	284.3	497.3	891.3	1052.3
125°	265.9	302.8	487.9	822.1	969.8
127.5°	283.7	320.3	482.8	769.7	896.4
130°	294.6	330.0	480.4	736.8	850.5
132.5°	305.5	340.9	478.0	708.7	809.4
135°	320.3	355.7	474.3	669.7	755.3
137.5°	336.3	368.5	472.5	635.2	707.3
140°	345.9	377.0	471.3	613.3	678.3
142.5°	355.6	384.3	470.1	596.1	650.5
145°	370.1	396.7	468.3	569.0	611.8
147.5°	386.4	409.2	466.8	547.6	581.3
150°	397.3	416.5	466.8	535.4	562.0
152.5°	405.8	422.6	465.6	524.4	546.3
155°	418.5	433.2	465.3	510.9	525.7
157.5°	430.8	442.4	465.3	501.8	513.0
160°	438.1	448.4	465.3	495.7	504.6
162.5°	445.3	453.3	466.5	490.8	497.3
165°	453.2	459.1	466.8	486.5	487.9
167.5°	461.4	464.3	468.3	481.3	482.5
170°	463.8	466.7	468.3	478.9	478.9
172.5°	466.2	468.0	468.3	476.5	476.5
175°	469.8	471.3	468.3	474.3	472.8
177.5°	471.0	471.0	467.4	472.2	469.8
180°	469.8	469.8	469.8	469.8	469.8

(END OF REPORT)