

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-6

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-6
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

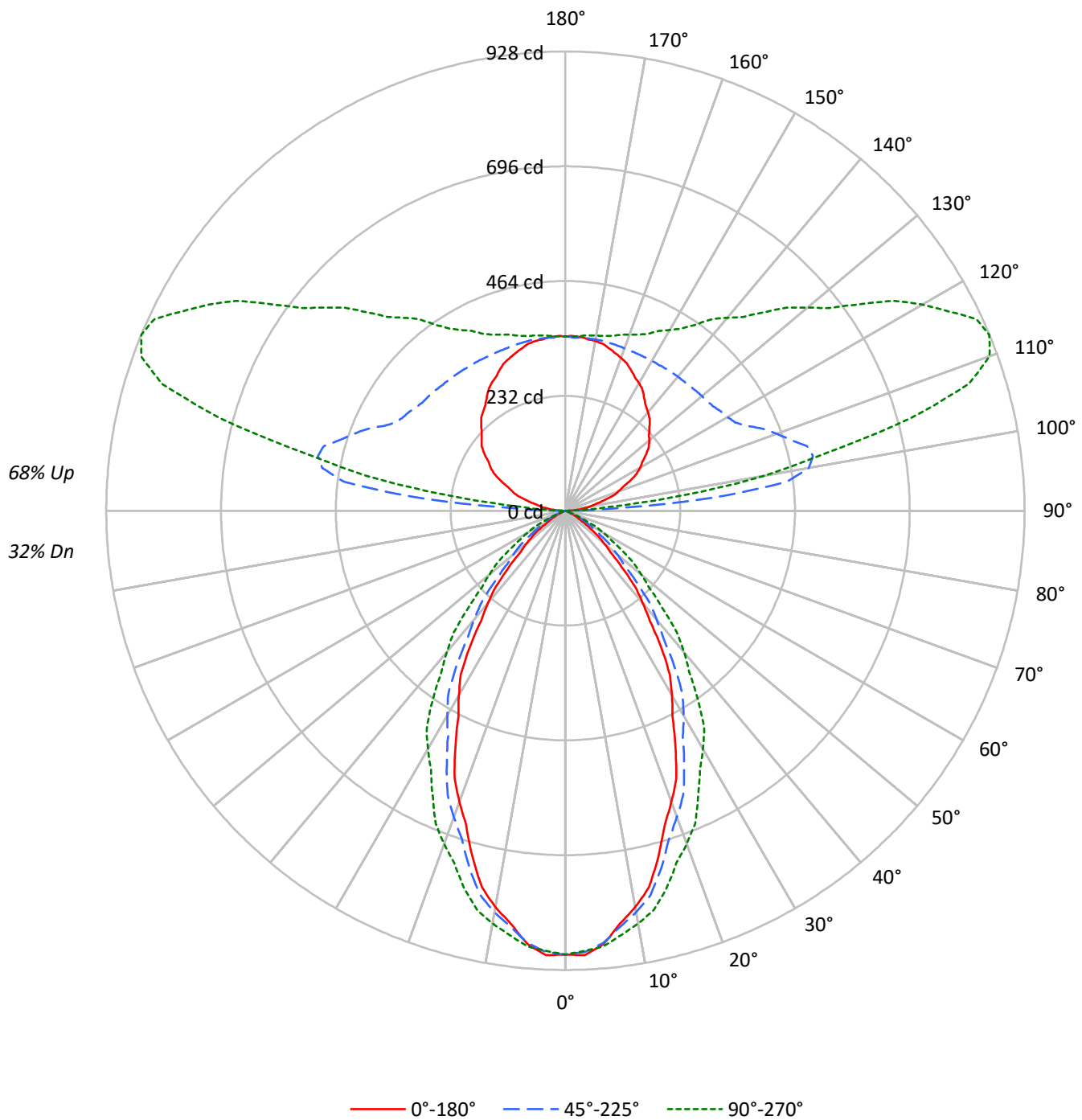
Lumens per Lamp: N/A
Luminaire Lumens: 3371.9 lumens
Efficiency: N/A
Efficacy: 57.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 58.5
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	103	103	103	103		92	92	92	92		73	73	73		56	56	56		39	39	39
1	95	91	88	85		85	82	79	77		66	64	62		50	49	48		36	36	35
2	87	81	75	71		79	73	69	65		59	56	53		46	44	42		34	33	32
3	80	72	66	61		72	65	60	56		53	49	46		41	39	37		31	29	28
4	74	65	58	52		67	59	53	48		48	44	40		38	35	33		28	27	25
5	68	58	51	45		62	53	47	42		43	39	36		34	32	29		26	24	23
6	63	52	45	40		57	48	42	37		40	35	32		32	29	26		24	22	21
7	59	48	40	35		53	44	37	33		36	32	28		29	26	24		22	20	19
8	55	44	36	32		50	40	34	30		33	29	25		27	24	21		21	19	17
9	51	40	33	28		46	37	31	27		31	26	23		25	22	20		20	18	16
10	48	37	30	26		43	34	28	24		28	24	21		23	20	18		18	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5517	5517	5517
5°	5428	5414	5454
10°	5078	5146	5290
15°	4617	4763	5029
20°	4098	4311	4689
25°	3569	3851	4308
30°	3057	3393	3947
35°	2535	2880	3512
40°	1947	2303	2993
45°	1407	1744	2408
50°	959	1299	1910
55°	623	939	1484
60°	358	662	1073
65°	95	405	543
70°	47	124	156
75°	21	10	0
80°	14	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2408 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	2.4
10°-20°	209.3	6.2
20°-30°	262.0	7.8
30°-40°	242.0	7.2
40°-50°	162.6	4.8
50°-60°	84.0	2.5
60°-70°	26.3	0.8
70°-80°	1.7	0.0
80°-90°	1.4	0.0
90°-100°	169.1	5.0
100°-110°	459.5	13.6
110°-120°	472.4	14.0
120°-130°	377.7	11.2
130°-140°	296.8	8.8
140°-150°	227.6	6.7
150°-160°	163.7	4.9
160°-170°	100.1	3.0
170°-180°	33.7	1.0
0°-30°	553.2	16.4
0°-40°	795.2	23.6
0°-60°	1041.9	30.9
0°-90°	1071.2	31.8
90°-120°	1101.1	32.7
90°-150°	2003.2	59.4
90°-180°	2301.0	68.2
0°-180°	3371.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	879	870	877	880	883	81
15°	725	722	748	773	790	202
25°	526	530	568	606	635	241
35°	338	346	384	429	468	209
45°	162	172	200	240	277	127
55°	58	68	88	112	138	54
65°	6	12	28	34	37	11
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	4	8	10	10	2
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.9	896.9	896.9	896.9	896.9
2.5°	898.9	890.5	892.7	892.6	890.3
5°	879.1	870.2	876.9	880.0	883.4
7.5°	841.9	835.0	847.9	857.6	864.7
10°	813.1	807.2	824.0	837.2	847.0
12.5°	779.8	775.2	795.5	813.7	826.1
15°	725.0	722.5	748.0	773.1	789.7
17.5°	666.4	666.3	695.4	726.6	746.6
20°	626.1	627.4	658.6	693.0	716.4
22.5°	585.8	588.8	622.2	658.0	684.8
25°	525.9	530.1	567.5	606.4	634.8
27.5°	468.3	474.5	513.8	554.2	588.8
30°	430.4	437.6	477.7	520.2	555.8
32.5°	393.3	401.9	440.9	485.8	522.1
35°	337.6	346.1	383.6	428.7	467.7
37.5°	280.0	288.3	325.0	369.4	411.6
40°	242.5	251.9	286.8	329.9	372.7
42.5°	208.5	217.9	250.7	293.0	333.5
45°	161.8	171.6	200.5	239.5	276.8
47.5°	123.1	133.7	159.1	194.4	228.4
50°	100.2	110.8	135.8	166.9	199.6
52.5°	81.8	92.1	114.6	144.0	173.9
55°	58.1	67.9	87.6	112.5	138.4
57.5°	40.2	48.6	66.3	87.1	107.3
60°	29.1	37.1	53.8	70.7	87.2
62.5°	19.4	26.7	43.0	56.0	67.1
65°	6.5	12.4	27.8	33.5	37.3
67.5°	3.3	4.0	14.6	15.4	16.7
70°	2.6	2.6	6.9	7.4	8.7
72.5°	1.9	1.9	2.8	3.6	3.8
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.9	1.6	2.0	2.0
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)