

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-WB-050U-100D-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-WB-050U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

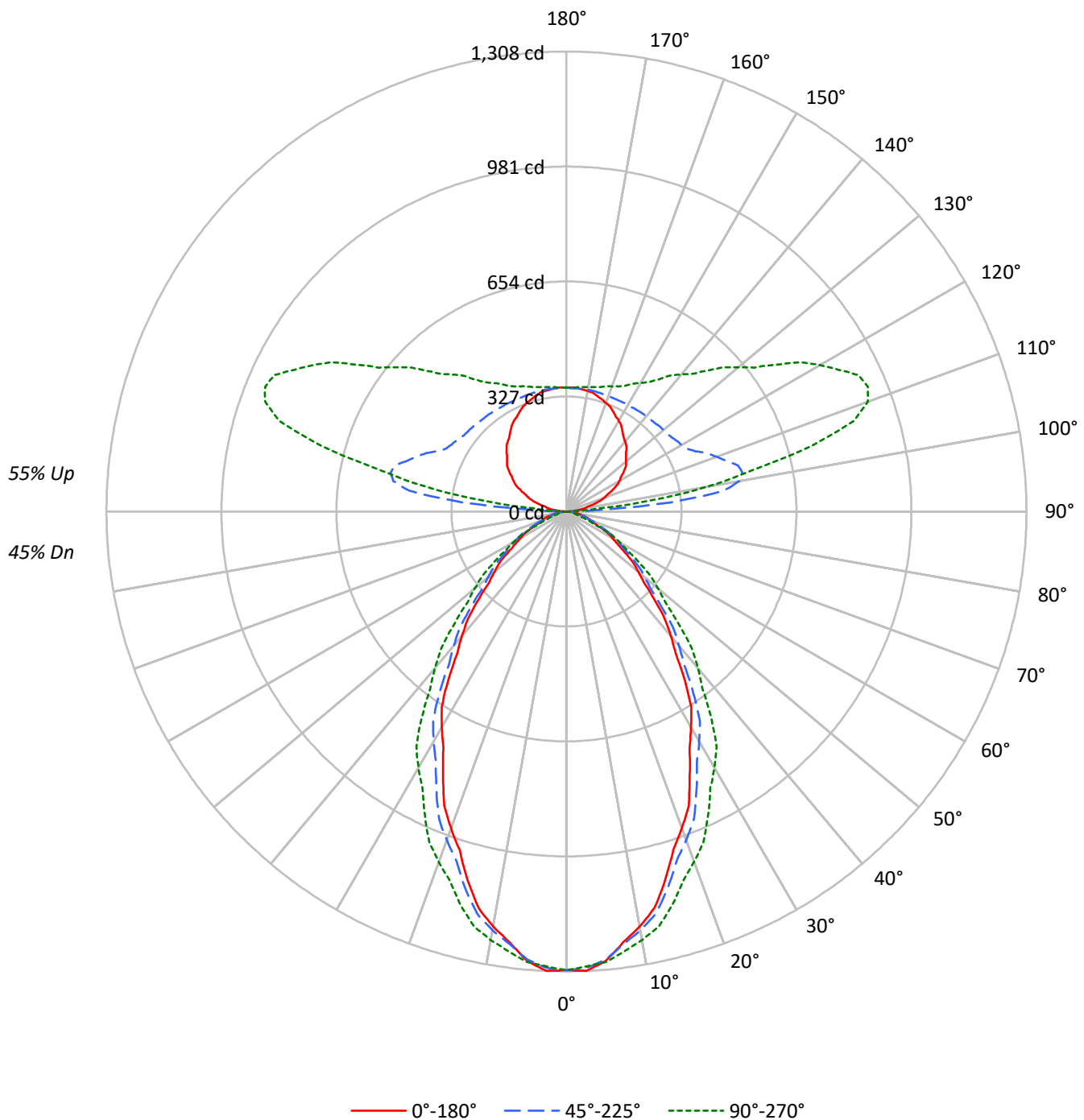
Lumens per Lamp: N/A
Luminaire Lumens: 4203.0 lumens
Efficiency: N/A
Efficacy: 57.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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	97	97	97	97	81	81	81	66	66	66	52	52	52
1	98	94	90	87	90	86	83	81	72	70	68	59	58	57	47	46	46
2	90	83	78	73	82	77	72	68	65	61	58	53	51	49	43	41	40
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35
4	76	66	59	54	70	61	55	50	52	48	44	44	40	38	36	33	32
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	28	25
7	61	49	42	36	56	46	39	35	39	34	31	33	30	27	28	25	23
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21
9	53	41	34	29	49	39	32	28	33	29	25	29	25	22	24	21	19
10	49	38	31	27	46	36	30	25	31	26	23	27	23	20	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8024	8024	8024
5°	7924	7896	7942
10°	7487	7555	7730
15°	6911	7071	7389
20°	6276	6512	6943
25°	5630	5936	6468
30°	5033	5362	5977
35°	4402	4719	5394
40°	3705	3999	4670
45°	3058	3321	3899
50°	2553	2783	3249
55°	2167	2388	2683
60°	1851	2070	2140
65°	1474	1741	1383
70°	1307	1360	843
75°	1210	1103	518
80°	1116	1013	446
85°	1009	932	367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3899 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	2.8
10°-20°	311.2	7.4
20°-30°	403.2	9.6
30°-40°	394.8	9.4
40°-50°	302.2	7.2
50°-60°	201.4	4.8
60°-70°	109.9	2.6
70°-80°	45.8	1.1
80°-90°	14.3	0.3
90°-100°	169.1	4.0
100°-110°	459.5	10.9
110°-120°	472.4	11.2
120°-130°	377.7	9.0
130°-140°	296.8	7.1
140°-150°	227.6	5.4
150°-160°	163.7	3.9
160°-170°	100.1	2.4
170°-180°	33.7	0.8
0°-30°	834.1	19.8
0°-40°	1228.8	29.2
0°-60°	1732.4	41.2
0°-90°	1902.4	45.3
90°-120°	1101.1	26.2
90°-150°	2003.2	47.7
90°-180°	2301.0	54.7
0°-180°	4203.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1283	1270	1279	1282	1286	119
15°	1085	1081	1110	1141	1160	303
25°	830	832	875	913	953	381
35°	586	589	628	671	718	364
45°	352	358	382	411	448	274
55°	202	210	223	231	250	183
65°	101	110	120	104	95	105
75°	51	51	46	32	22	54
85°	14	14	13	8	5	16
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	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.6	1304.6	1304.6	1304.6	1304.6
2.5°	1307.8	1296.1	1299.1	1299.0	1295.4
5°	1283.4	1270.5	1278.8	1281.8	1286.3
7.5°	1235.8	1226.0	1241.1	1252.3	1261.4
10°	1198.7	1190.3	1209.6	1225.8	1237.6
12.5°	1155.6	1148.6	1172.5	1194.3	1209.7
15°	1085.3	1081.4	1110.5	1140.7	1160.3
17.5°	1010.1	1008.2	1041.6	1076.9	1101.9
20°	958.8	958.3	994.9	1031.6	1060.7
22.5°	907.1	908.3	946.8	985.0	1018.1
25°	829.5	831.7	874.7	912.8	953.1
27.5°	757.7	758.7	803.1	843.4	886.4
30°	708.7	711.5	755.0	796.7	841.5
32.5°	659.7	662.9	705.6	748.6	794.3
35°	586.2	589.0	628.5	670.8	718.4
37.5°	510.4	514.2	549.3	589.3	636.1
40°	461.4	467.0	498.0	535.7	581.6
42.5°	414.2	421.2	449.9	485.7	527.1
45°	351.5	358.2	381.8	410.7	448.2
47.5°	297.4	305.2	323.3	348.2	380.2
50°	266.8	274.0	290.8	309.2	339.5
52.5°	239.7	247.0	261.9	276.2	301.9
55°	202.1	210.5	222.7	231.1	250.2
57.5°	171.2	179.2	188.9	192.7	204.2
60°	150.5	159.5	168.3	167.9	174.0
62.5°	131.8	139.4	148.1	142.1	142.4
65°	101.3	109.7	119.6	104.5	95.0
67.5°	81.9	83.6	93.9	72.9	61.6
70°	72.7	72.7	75.6	56.5	46.9
72.5°	64.0	64.0	61.4	45.9	35.9
75°	50.9	50.9	46.4	31.8	21.8
77.5°	39.3	38.8	35.5	23.7	15.8
80°	31.5	31.5	28.6	18.8	12.6
82.5°	24.6	24.6	22.2	14.6	9.4
85°	14.3	14.3	13.2	8.5	5.2
87.5°	5.3	5.9	6.2	4.8	4.3
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)