

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-025U-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

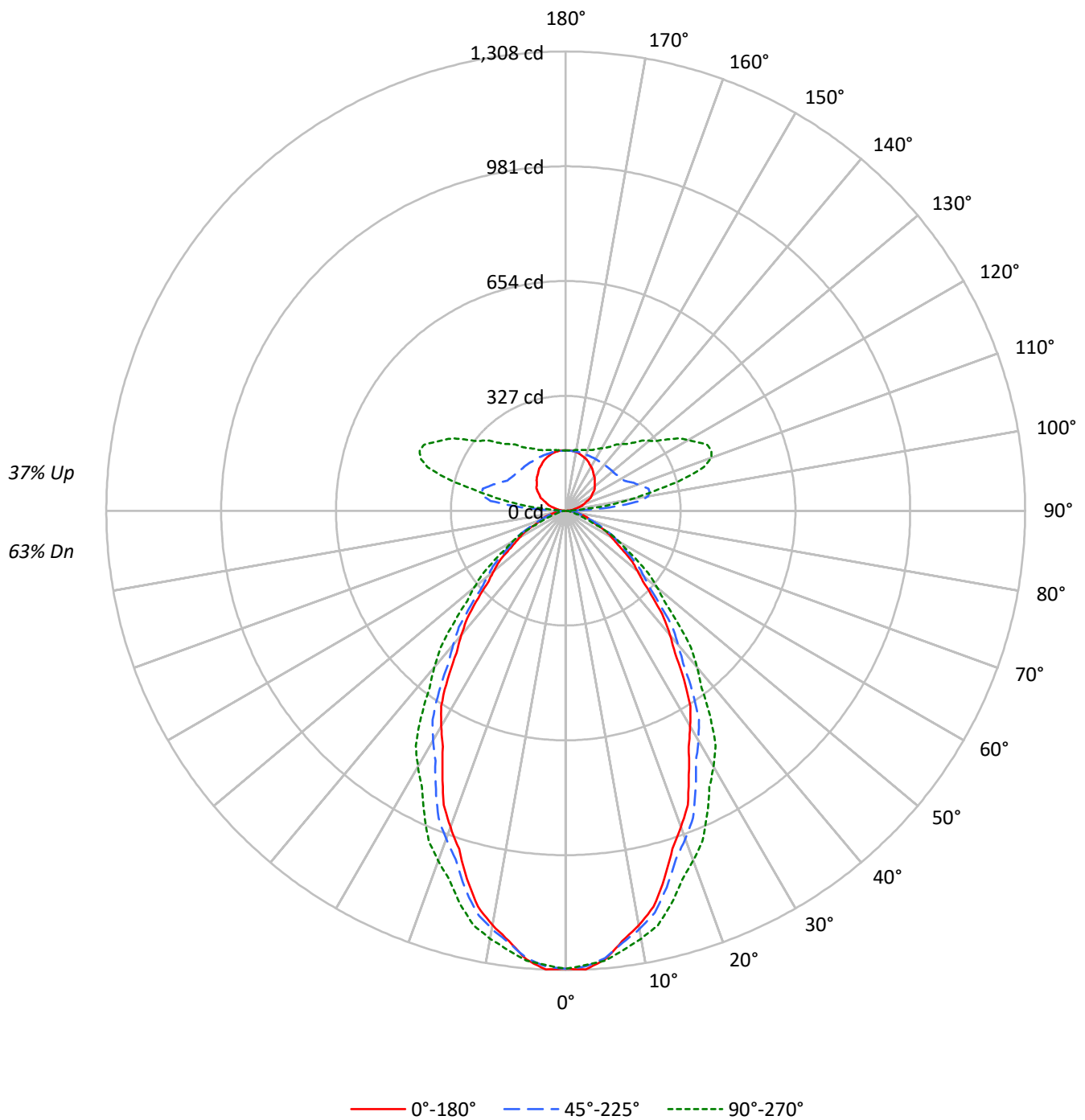
Lumens per Lamp: N/A
Luminaire Lumens: 3017.5 lumens
Efficiency: N/A
Efficacy: 47.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 63.5
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	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68
1	102	98	95	92	96	92	89	87	82	79	77	72	70	69	62	61	60
2	94	88	82	77	88	83	78	74	73	70	67	65	62	60	57	55	53
3	87	78	72	66	82	74	68	63	66	62	58	59	55	52	52	49	47
4	80	71	63	58	76	67	60	55	60	55	51	53	49	46	47	44	42
5	75	64	56	51	70	61	54	49	54	49	45	49	45	41	43	40	38
6	69	58	50	45	65	55	48	43	50	44	40	45	40	37	40	37	34
7	65	53	46	40	61	50	44	39	46	40	36	41	37	34	37	34	31
8	60	49	41	36	57	46	40	35	42	37	33	38	34	31	34	31	28
9	57	45	38	33	53	43	36	32	39	34	30	36	31	28	32	29	26
10	53	42	35	30	50	40	33	29	36	31	27	33	29	26	30	27	24

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	4.0
10°-20°	311.2	10.3
20°-30°	403.2	13.4
30°-40°	394.8	13.1
40°-50°	302.2	10.0
50°-60°	201.4	6.7
60°-70°	109.9	3.6
70°-80°	45.8	1.5
80°-90°	13.9	0.5
90°-100°	83.9	2.8
100°-110°	220.5	7.3
110°-120°	228.7	7.6
120°-130°	183.4	6.1
130°-140°	143.9	4.8
140°-150°	110.5	3.7
150°-160°	79.6	2.6
160°-170°	48.7	1.6
170°-180°	16.4	0.5
0°-30°	834.1	27.6
0°-40°	1228.8	40.7
0°-60°	1732.4	57.4
0°-90°	1901.9	63.0
90°-120°	533.1	17.7
90°-150°	970.9	32.2
90°-180°	1116.0	37.0
0°-180°	3017.5	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	3	9	4	4	2
95°	11	43	144	74	51	12
105°	40	60	244	370	345	42
115°	71	86	195	390	445	70
125°	98	110	178	300	354	87
135°	117	129	172	242	275	91
145°	136	144	170	207	223	85
155°	153	158	170	187	192	70
165°	166	168	170	177	179	47
175°	172	172	171	173	173	16
180°	172	172	172	172	172	

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	5.7	6.3	3.6	3.2
90°	1.1	3.3	8.8	4.4	4.4
92.5°	4.6	22.3	49.4	21.9	14.1
95°	11.0	43.4	144.5	74.5	50.8
97.5°	19.2	47.7	216.3	172.0	126.7
100°	25.4	51.3	238.3	241.5	187.6
102.5°	30.7	54.8	244.5	300.8	254.7
105°	39.7	60.2	243.8	370.2	345.3
107.5°	49.0	68.0	229.9	406.2	412.2
110°	55.2	72.4	218.5	415.4	441.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	61.3	77.7	207.9	409.6	449.3
115°	70.6	85.7	195.3	389.6	444.7
117.5°	79.7	93.5	186.7	362.0	423.0
120°	85.0	97.9	183.2	343.4	402.7
122.5°	90.3	103.2	180.5	324.8	383.3
125°	98.2	110.1	177.6	300.2	354.2
127.5°	104.6	116.7	175.2	280.4	325.9
130°	108.1	121.1	174.3	268.0	310.0
132.5°	111.7	124.6	173.4	257.3	295.0
135°	117.0	128.8	172.1	242.4	274.7
137.5°	122.5	134.1	171.9	231.2	257.7
140°	126.9	137.7	171.0	222.3	247.2
142.5°	130.4	140.3	171.0	216.1	237.4
145°	135.7	144.3	169.9	206.7	222.9
147.5°	141.0	149.4	169.9	198.9	212.3
150°	144.5	152.1	169.9	194.4	205.2
152.5°	148.1	153.9	169.9	190.8	199.0
155°	153.4	157.7	169.9	186.6	192.0
157.5°	157.3	161.4	169.9	182.8	186.7
160°	160.0	163.2	169.9	181.0	183.2
162.5°	162.6	165.0	169.9	179.2	181.4
165°	165.5	167.7	169.9	176.6	178.7
167.5°	168.2	169.2	171.0	175.5	176.3
170°	169.9	171.0	171.0	175.4	175.4
172.5°	170.8	171.0	171.0	174.5	173.7
175°	172.1	172.1	171.0	173.2	173.2
177.5°	172.1	172.1	171.2	173.0	172.1
180°	172.1	172.1	172.1	172.1	172.1

(END OF REPORT)