

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-100U-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 (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

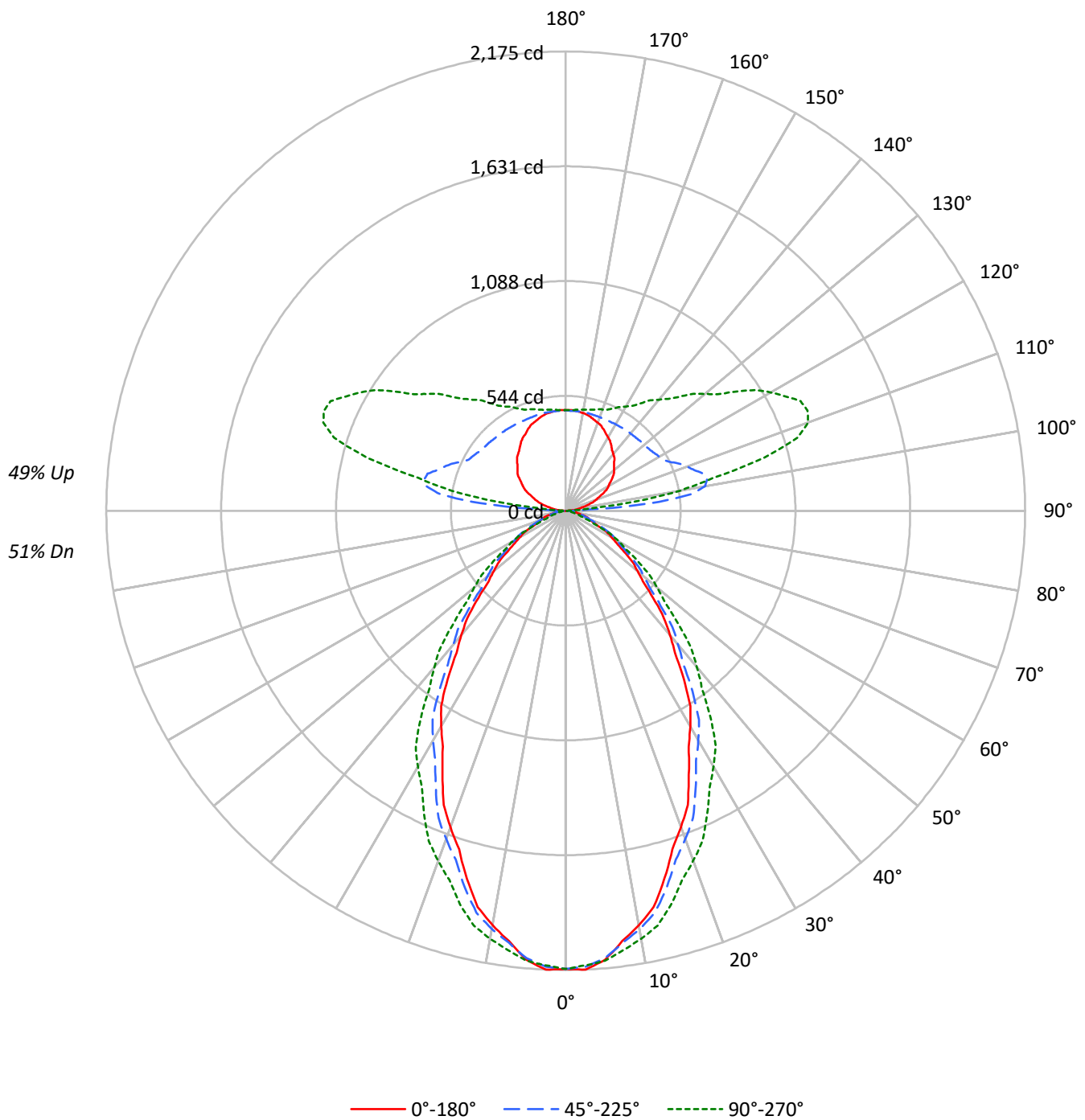
Lumens per Lamp: N/A
Luminaire Lumens: 6255.7 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	99	99	99	99	84	84	84	70	70	70	57	57	57
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23
9	54	42	35	30	50	40	34	29	35	30	27	31	27	24	27	24	21
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20021	20021	20021
5°	19771	19701	19816
10°	18680	18849	19286
15°	17245	17644	18436
20°	15659	16248	17323
25°	14045	14811	16139
30°	12558	13380	14912
35°	10982	11776	13459
40°	9244	9977	11651
45°	7628	8287	9728
50°	6369	6943	8104
55°	5406	5958	6693
60°	4620	5165	5342
65°	3679	4344	3451
70°	3261	3391	2107
75°	3019	2748	1290
80°	2784	2529	1110
85°	2519	2318	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9728 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.0	3.2
10°-20°	517.7	8.3
20°-30°	670.6	10.7
30°-40°	656.7	10.5
40°-50°	502.7	8.0
50°-60°	334.9	5.4
60°-70°	182.8	2.9
70°-80°	76.2	1.2
80°-90°	22.5	0.4
90°-100°	222.9	3.6
100°-110°	615.3	9.8
110°-120°	634.6	10.1
120°-130°	510.0	8.2
130°-140°	400.8	6.4
140°-150°	307.4	4.9
150°-160°	220.9	3.5
160°-170°	135.1	2.2
170°-180°	45.5	0.7
0°-30°	1387.4	22.2
0°-40°	2044.0	32.7
0°-60°	2881.6	46.1
0°-90°	3163.1	50.6
90°-120°	1472.8	23.5
90°-150°	2691.0	43.0
90°-180°	3093.0	49.4
0°-180°	6255.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2170	2170	2170	2170	2170	
5°	2135	2113	2127	2132	2140	199
15°	1805	1799	1847	1898	1930	504
25°	1380	1383	1455	1518	1585	634
35°	975	980	1046	1116	1195	606
45°	585	596	635	683	746	456
55°	336	350	370	384	416	305
65°	168	182	199	174	158	175
75°	85	85	77	53	36	90
85°	24	24	22	14	9	26
90°	2	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-100U-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2170.0	2170.0	2170.0	2170.0	2170.0
2.5°	2175.4	2156.0	2160.9	2160.8	2154.8
5°	2134.8	2113.4	2127.2	2132.1	2139.6
7.5°	2055.6	2039.4	2064.5	2083.2	2098.2
10°	1993.9	1979.9	2012.0	2039.1	2058.6
12.5°	1922.3	1910.6	1950.3	1986.7	2012.2
15°	1805.4	1798.8	1847.2	1897.5	1930.1
17.5°	1680.2	1677.1	1732.6	1791.3	1833.0
20°	1594.9	1594.0	1654.9	1716.0	1764.4
22.5°	1508.8	1510.9	1574.9	1638.4	1693.6
25°	1379.7	1383.4	1454.9	1518.4	1585.4
27.5°	1260.3	1262.0	1335.9	1402.9	1474.4
30°	1178.8	1183.5	1255.9	1325.2	1399.7
32.5°	1097.3	1102.7	1173.7	1245.3	1321.3
35°	975.0	979.7	1045.5	1115.9	1195.0
37.5°	849.0	855.3	913.7	980.2	1058.1
40°	767.5	776.8	828.4	891.1	967.4
42.5°	689.0	700.5	748.4	807.9	876.8
45°	584.6	595.8	635.1	683.2	745.6
47.5°	494.8	507.6	537.8	579.2	632.4
50°	443.7	455.8	483.7	514.4	564.6
52.5°	398.8	410.9	435.7	459.4	502.2
55°	336.1	350.1	370.4	384.5	416.1
57.5°	284.7	298.1	314.2	320.6	339.7
60°	250.4	265.3	279.9	279.2	289.5
62.5°	219.2	231.9	246.4	236.3	236.9
65°	168.5	182.5	199.0	173.9	158.1
67.5°	136.2	139.1	156.2	121.3	102.5
70°	120.9	120.9	125.7	93.9	78.1
72.5°	106.5	106.5	102.1	76.4	59.8
75°	84.7	84.7	77.1	52.9	36.2
77.5°	65.3	64.6	59.0	39.5	26.3
80°	52.4	52.4	47.6	31.2	20.9
82.5°	40.9	40.9	36.9	24.4	15.6
85°	23.8	23.8	21.9	14.2	8.6
87.5°	8.7	9.0	8.8	5.9	5.3
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)