

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-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

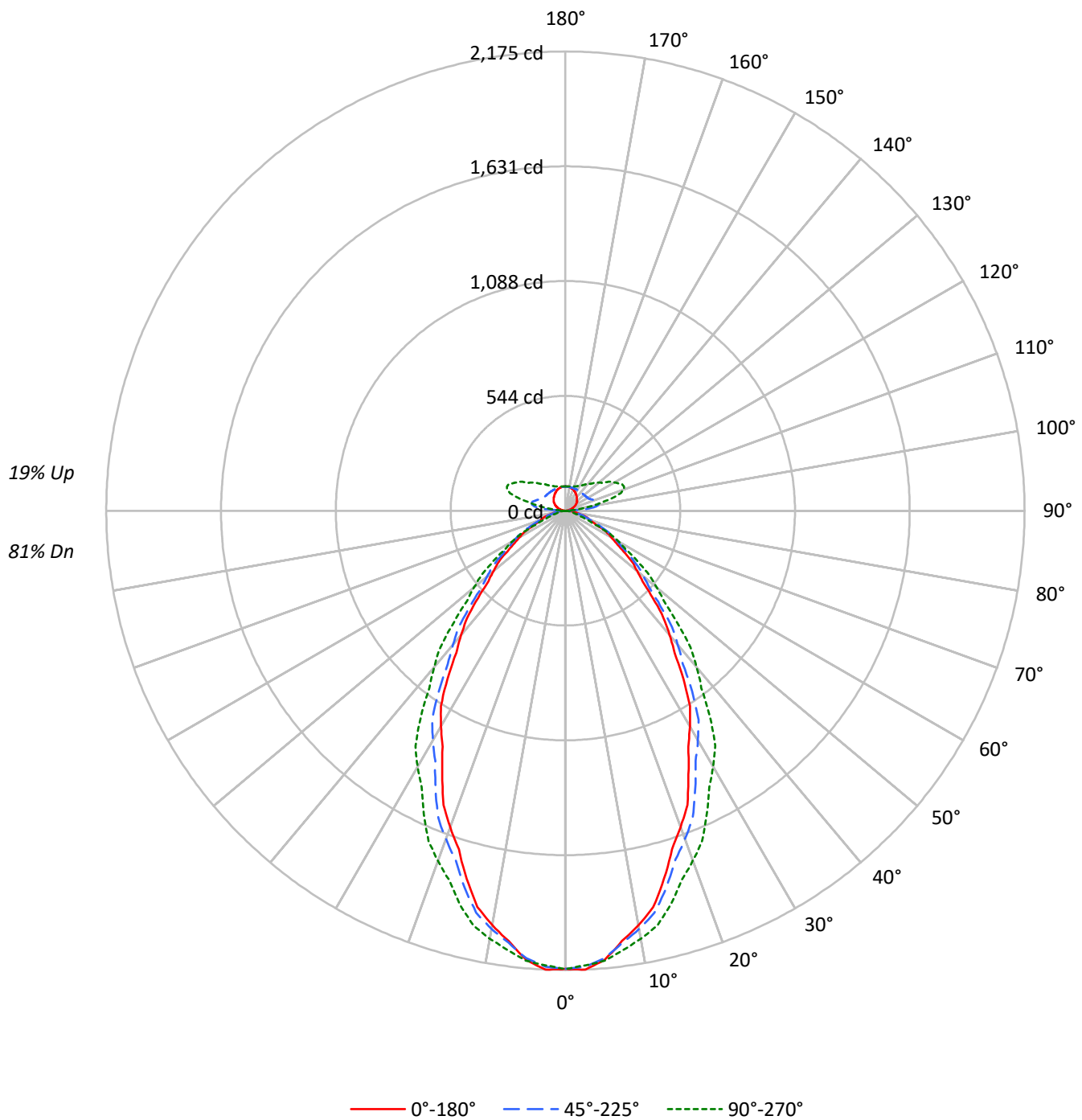
Lumens per Lamp: N/A
Luminaire Lumens: 3906.5 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 49.5
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	0		
RCR																					
0	115	115	115	115	110	110	110	110	101	101	101	92	92	92	85	85	85	81			
1	107	103	99	96	102	99	96	93	91	89	87	84	82	81	78	76	75	72			
2	99	92	87	82	94	89	84	79	82	78	75	76	73	70	71	68	66	63			
3	91	83	76	71	87	80	74	69	74	69	65	69	65	62	64	61	59	56			
4	85	75	67	62	81	72	66	61	68	62	58	63	59	55	59	55	52	50			
5	79	68	60	55	75	66	59	54	62	56	51	58	53	49	54	50	47	45			
6	73	62	54	49	70	60	53	48	57	51	46	53	48	44	50	46	43	40			
7	69	57	49	44	66	55	48	43	52	46	42	49	44	40	46	42	39	37			
8	64	52	45	40	62	51	44	39	48	42	38	46	40	37	43	39	35	34			
9	60	49	41	37	58	47	41	36	45	39	35	42	37	34	40	36	33	31			
10	57	45	38	34	55	44	37	33	42	36	32	40	35	31	38	33	30	28			

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	5.1
10°-20°	517.7	13.3
20°-30°	670.6	17.2
30°-40°	656.7	16.8
40°-50°	502.7	12.9
50°-60°	334.9	8.6
60°-70°	182.8	4.7
70°-80°	76.2	1.9
80°-90°	22.2	0.6
90°-100°	55.9	1.4
100°-110°	147.0	3.8
110°-120°	152.5	3.9
120°-130°	122.3	3.1
130°-140°	95.9	2.5
140°-150°	73.6	1.9
150°-160°	53.0	1.4
160°-170°	32.5	0.8
170°-180°	11.0	0.3
0°-30°	1387.4	35.5
0°-40°	2044.0	52.3
0°-60°	2881.6	73.8
0°-90°	3162.8	81.0
90°-120°	355.4	9.1
90°-150°	647.3	16.6
90°-180°	744.0	19.0
0°-180°	3906.5	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°	1	2	6	3	3	2
95°	7	29	96	50	34	8
105°	26	40	163	247	230	28
115°	47	57	130	260	296	46
125°	66	73	118	200	236	58
135°	78	86	115	162	183	60
145°	90	96	113	138	149	57
155°	102	105	113	124	128	47
165°	110	112	113	118	119	31
175°	115	115	114	116	116	11
180°	115	115	115	115	115	

TEST NUMBER:

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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°	8.5	8.8	8.8	5.1	4.4
90°	0.7	2.2	5.9	2.9	2.9
92.5°	3.1	14.9	33.0	14.6	9.4
95°	7.4	28.9	96.4	49.7	33.8
97.5°	12.8	31.8	144.2	114.7	84.4
100°	16.9	34.2	158.9	161.0	125.0
102.5°	20.4	36.6	163.0	200.6	169.8
105°	26.5	40.1	162.6	246.8	230.2
107.5°	32.7	45.3	153.3	270.8	274.8
110°	36.8	48.3	145.6	277.0	294.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	40.9	51.8	138.6	273.1	299.5
115°	47.1	57.1	130.2	259.8	296.4
117.5°	53.1	62.3	124.5	241.3	282.0
120°	56.6	65.3	122.1	228.9	268.5
122.5°	60.2	68.8	120.3	216.6	255.5
125°	65.5	73.4	118.4	200.2	236.1
127.5°	69.7	77.8	116.8	186.9	217.3
130°	72.1	80.7	116.2	178.6	206.7
132.5°	74.4	83.1	115.6	171.5	196.7
135°	78.0	85.9	114.7	161.6	183.2
137.5°	81.6	89.4	114.6	154.1	171.8
140°	84.6	91.8	114.0	148.2	164.8
142.5°	86.9	93.6	114.0	144.1	158.3
145°	90.5	96.2	113.3	137.8	148.6
147.5°	94.0	99.6	113.3	132.6	141.5
150°	96.4	101.4	113.3	129.6	136.8
152.5°	98.7	102.6	113.3	127.2	132.7
155°	102.2	105.1	113.3	124.4	128.0
157.5°	104.9	107.6	113.3	121.9	124.5
160°	106.7	108.8	113.3	120.7	122.1
162.5°	108.4	110.0	113.3	119.5	120.9
165°	110.3	111.8	113.3	117.7	119.2
167.5°	112.1	112.8	114.0	117.0	117.5
170°	113.3	114.0	114.0	117.0	117.0
172.5°	113.9	114.0	114.0	116.4	115.8
175°	114.7	114.7	114.0	115.5	115.5
177.5°	114.7	114.7	114.2	115.3	114.7
180°	114.7	114.7	114.7	114.7	114.7

(END OF REPORT)