

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-025U-100D-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-BB-025U-100D-927-1D-UNV-STD-W-4
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

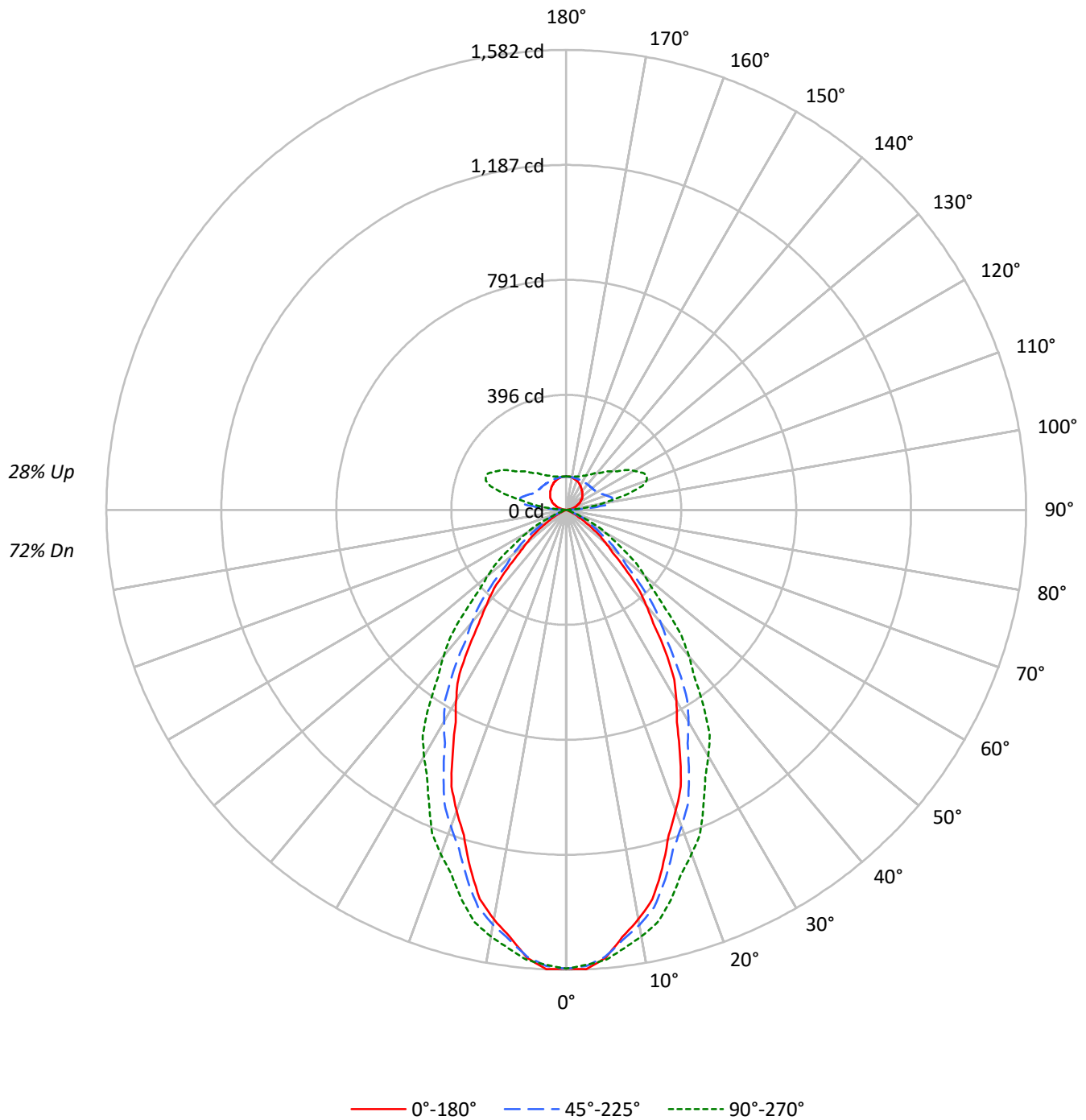
Lumens per Lamp: N/A
Luminaire Lumens: 2626.9 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.7
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76
1	105	102	99	96	100	97	94	92	88	86	84	79	78	76	71	70	69
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14559	14559	14559
5°	14325	14289	14395
10°	13404	13582	13961
15°	12185	12572	13271
20°	10816	11378	12375
25°	9420	10166	11370
30°	8068	8954	10419
35°	6690	7601	9270
40°	5140	6077	7898
45°	3716	4602	6356
50°	2532	3430	5041
55°	1646	2480	3917
60°	945	1747	2832
65°	251	1068	1434
70°	124	329	413
75°	53	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6356 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.0	5.5
10°-20°	368.3	14.0
20°-30°	461.1	17.6
30°-40°	425.9	16.2
40°-50°	286.2	10.9
50°-60°	147.8	5.6
60°-70°	46.3	1.8
70°-80°	2.9	0.1
80°-90°	0.7	0.0
90°-100°	55.9	2.1
100°-110°	147.0	5.6
110°-120°	152.5	5.8
120°-130°	122.3	4.7
130°-140°	95.9	3.7
140°-150°	73.6	2.8
150°-160°	53.0	2.0
160°-170°	32.5	1.2
170°-180°	11.0	0.4
0°-30°	973.4	37.1
0°-40°	1399.2	53.3
0°-60°	1833.2	69.8
0°-90°	1883.1	71.7
90°-120°	355.4	13.5
90°-150°	647.3	24.6
90°-180°	744.0	28.3
0°-180°	2626.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1578	1578	1578	1578	1578	
5°	1547	1531	1543	1548	1554	143
15°	1276	1271	1316	1360	1389	355
25°	925	933	999	1067	1117	424
35°	594	609	675	754	823	368
45°	285	302	353	421	487	224
55°	102	120	154	198	244	95
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	1	2	6	3	3	1
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°	1578.0	1578.0	1578.0	1578.0	1578.0
2.5°	1581.7	1566.8	1570.7	1570.6	1566.4
5°	1546.7	1531.0	1542.9	1548.4	1554.3
7.5°	1481.4	1469.1	1491.9	1509.0	1521.4
10°	1430.7	1420.2	1449.8	1473.1	1490.2
12.5°	1372.0	1364.0	1399.7	1431.6	1453.6
15°	1275.7	1271.2	1316.2	1360.3	1389.4
17.5°	1172.5	1172.3	1223.6	1278.5	1313.6
20°	1101.6	1103.9	1158.9	1219.4	1260.4
22.5°	1030.8	1036.0	1094.8	1157.8	1204.9
25°	925.3	932.7	998.6	1066.9	1116.9
27.5°	823.9	834.8	904.1	975.1	1036.0
30°	757.3	770.0	840.5	915.3	978.0
32.5°	692.0	707.1	775.8	854.8	918.7
35°	594.0	608.9	674.9	754.3	823.0
37.5°	492.7	507.4	571.8	650.0	724.2
40°	426.8	443.2	504.6	580.4	655.8
42.5°	366.9	383.3	441.1	515.6	586.8
45°	284.8	301.9	352.7	421.4	487.1
47.5°	216.7	235.3	279.9	342.0	401.9
50°	176.4	195.0	239.0	293.7	351.2
52.5°	144.0	162.0	201.7	253.3	306.0
55°	102.3	119.5	154.2	198.0	243.5
57.5°	70.7	85.5	116.7	153.2	188.9
60°	51.2	65.3	94.7	124.3	153.5
62.5°	34.0	47.0	75.7	98.5	118.0
65°	11.5	21.9	48.9	58.9	65.7
67.5°	5.8	7.0	25.7	27.1	29.3
70°	4.6	4.6	12.2	13.0	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.1	0.4	1.2	0.6	0.6
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)