

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-075U-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

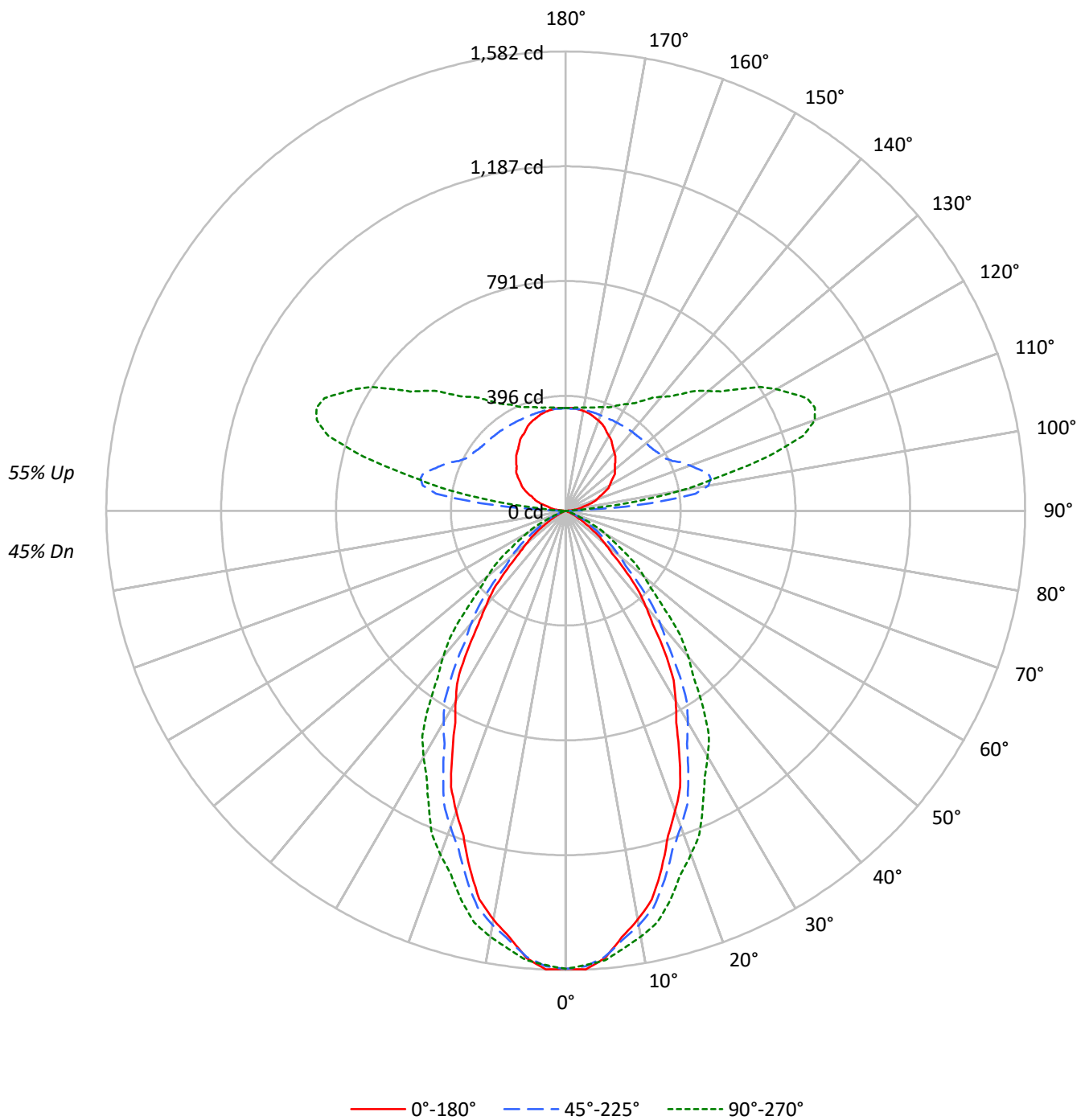
Lumens per Lamp: N/A
Luminaire Lumens: 4188.6 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	65	65	65	51	51	51
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42
3	84	76	69	64	77	70	65	60	60	56	53	50	47	45	41	39	38
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	25	22	20

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	3.4
10°-20°	368.3	8.8
20°-30°	461.1	11.0
30°-40°	425.9	10.2
40°-50°	286.2	6.8
50°-60°	147.8	3.5
60°-70°	46.3	1.1
70°-80°	2.9	0.1
80°-90°	1.0	0.0
90°-100°	166.9	4.0
100°-110°	459.2	11.0
110°-120°	473.9	11.3
120°-130°	379.7	9.1
130°-140°	298.2	7.1
140°-150°	228.6	5.5
150°-160°	164.3	3.9
160°-170°	100.5	2.4
170°-180°	33.9	0.8
0°-30°	973.4	23.2
0°-40°	1399.2	33.4
0°-60°	1833.2	43.8
0°-90°	1883.4	45.0
90°-120°	1100.0	26.3
90°-150°	2006.5	47.9
90°-180°	2305.0	55.0
0°-180°	4188.6	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	3	5	7	7	2
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

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°	0.2	0.6	1.1	1.4	1.4
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)