

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-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-WB-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

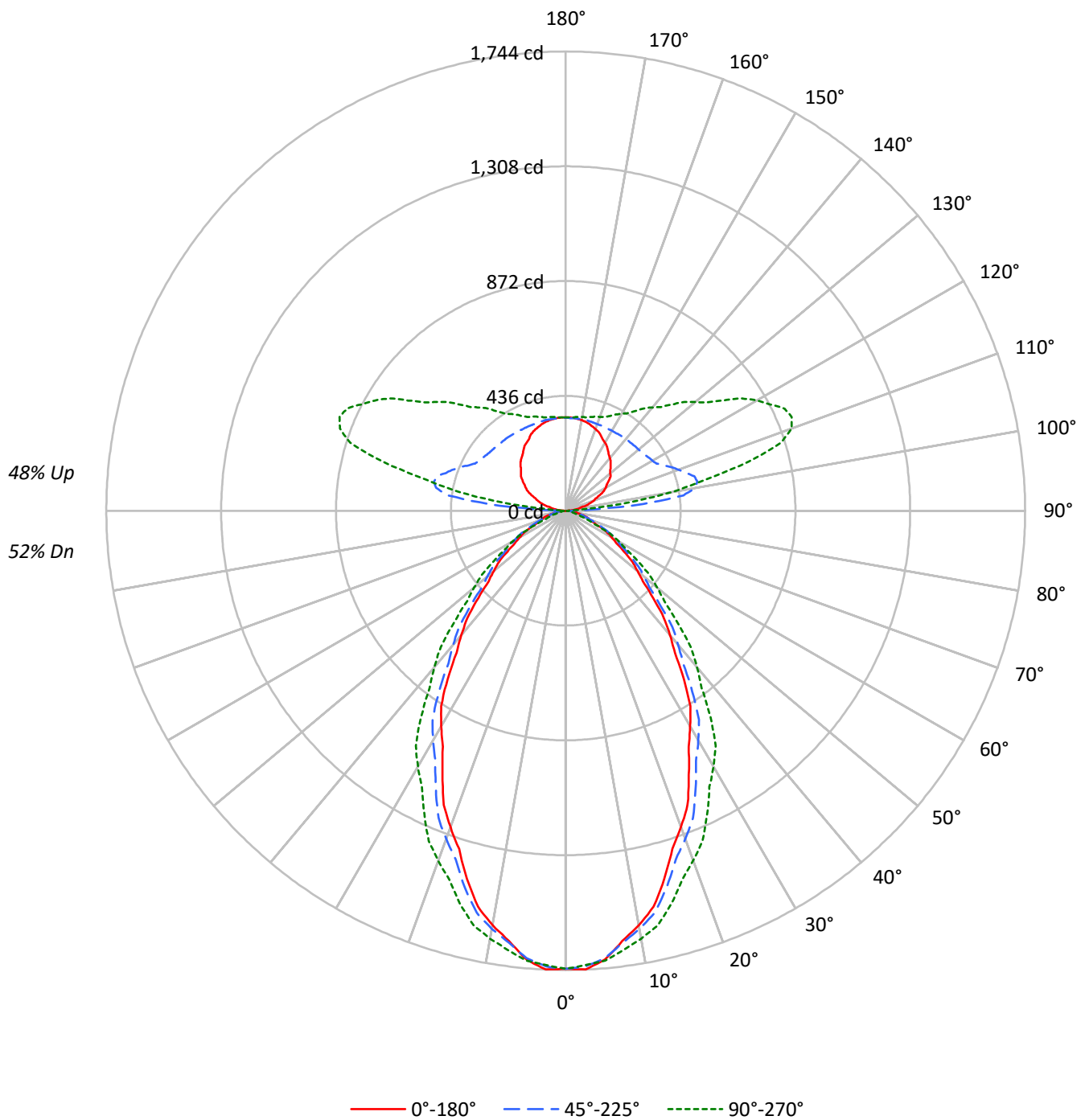
Lumens per Lamp: N/A
Luminaire Lumens: 4840.8 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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	50	30	10
RCR																				
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52		
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46		
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41		
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36		
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32		
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29		
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26		
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24		
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22		
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20		
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16048	16048	16048
5°	15848	15792	15883
10°	14973	15109	15459
15°	13822	14143	14777
20°	12552	13024	13886
25°	11258	11872	12937
30°	10066	10725	11953
35°	8803	9438	10789
40°	7409	7997	9340
45°	6114	6643	7797
50°	5106	5565	6496
55°	4333	4776	5364
60°	3703	4141	4281
65°	2949	3482	2766
70°	2614	2716	1689
75°	2420	2203	1034
80°	2232	2030	893
85°	2022	1863	730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7797 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	3.3
10°-20°	415.0	8.6
20°-30°	537.5	11.1
30°-40°	526.4	10.9
40°-50°	402.9	8.3
50°-60°	268.5	5.5
60°-70°	146.5	3.0
70°-80°	61.0	1.3
80°-90°	18.2	0.4
90°-100°	166.9	3.4
100°-110°	459.2	9.5
110°-120°	473.9	9.8
120°-130°	379.7	7.8
130°-140°	298.2	6.2
140°-150°	228.6	4.7
150°-160°	164.3	3.4
160°-170°	100.5	2.1
170°-180°	33.9	0.7
0°-30°	1112.1	23.0
0°-40°	1638.4	33.8
0°-60°	2309.8	47.7
0°-90°	2535.6	52.4
90°-120°	1100.0	22.7
90°-150°	2006.5	41.5
90°-180°	2305.0	47.6
0°-180°	4840.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1739	1739	1739	1739	1739	
5°	1711	1694	1705	1709	1715	159
15°	1447	1442	1481	1521	1547	404
25°	1106	1109	1166	1217	1271	509
35°	782	785	838	894	958	486
45°	469	478	509	548	598	365
55°	269	281	297	308	334	244
65°	135	146	160	139	127	140
75°	68	68	62	42	29	73
85°	19	19	18	11	7	21
90°	1	3	5	7	7	3
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°	1739.4	1739.4	1739.4	1739.4	1739.4
2.5°	1743.7	1728.2	1732.1	1732.0	1727.2
5°	1711.2	1694.0	1705.1	1709.0	1715.0
7.5°	1647.7	1634.7	1654.9	1669.8	1681.9
10°	1598.2	1587.0	1612.7	1634.5	1650.1
12.5°	1540.8	1531.4	1563.3	1592.4	1612.9
15°	1447.1	1441.9	1480.7	1521.0	1547.1
17.5°	1346.8	1344.3	1388.8	1435.8	1469.2
20°	1278.4	1277.7	1326.5	1375.5	1414.3
22.5°	1209.4	1211.1	1262.4	1313.3	1357.5
25°	1105.9	1108.9	1166.2	1217.1	1270.8
27.5°	1010.2	1011.6	1070.8	1124.5	1181.8
30°	944.9	948.6	1006.7	1062.3	1122.0
32.5°	879.6	883.9	940.8	998.2	1059.1
35°	781.6	785.3	838.0	894.4	957.9
37.5°	680.5	685.6	732.4	785.7	848.1
40°	615.2	622.6	664.0	714.3	775.5
42.5°	552.3	561.5	599.9	647.6	702.8
45°	468.6	477.6	509.1	547.6	597.6
47.5°	396.6	406.9	431.1	464.3	506.9
50°	355.7	365.4	387.7	412.3	452.6
52.5°	319.6	329.3	349.3	368.2	402.5
55°	269.4	280.6	296.9	308.2	333.5
57.5°	228.2	239.0	251.9	257.0	272.3
60°	200.7	212.7	224.4	223.8	232.0
62.5°	175.7	185.8	197.5	189.4	189.9
65°	135.1	146.3	159.5	139.4	126.7
67.5°	109.1	111.5	125.2	97.2	82.1
70°	96.9	96.9	100.7	75.3	62.6
72.5°	85.3	85.3	81.8	61.2	47.9
75°	67.9	67.9	61.8	42.4	29.0
77.5°	52.4	51.8	47.3	31.7	21.1
80°	42.0	42.0	38.2	25.0	16.8
82.5°	32.8	32.8	29.6	19.5	12.5
85°	19.1	19.1	17.6	11.3	6.9
87.5°	6.9	7.3	7.2	5.0	4.4
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)