

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-F-075U-075D-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, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

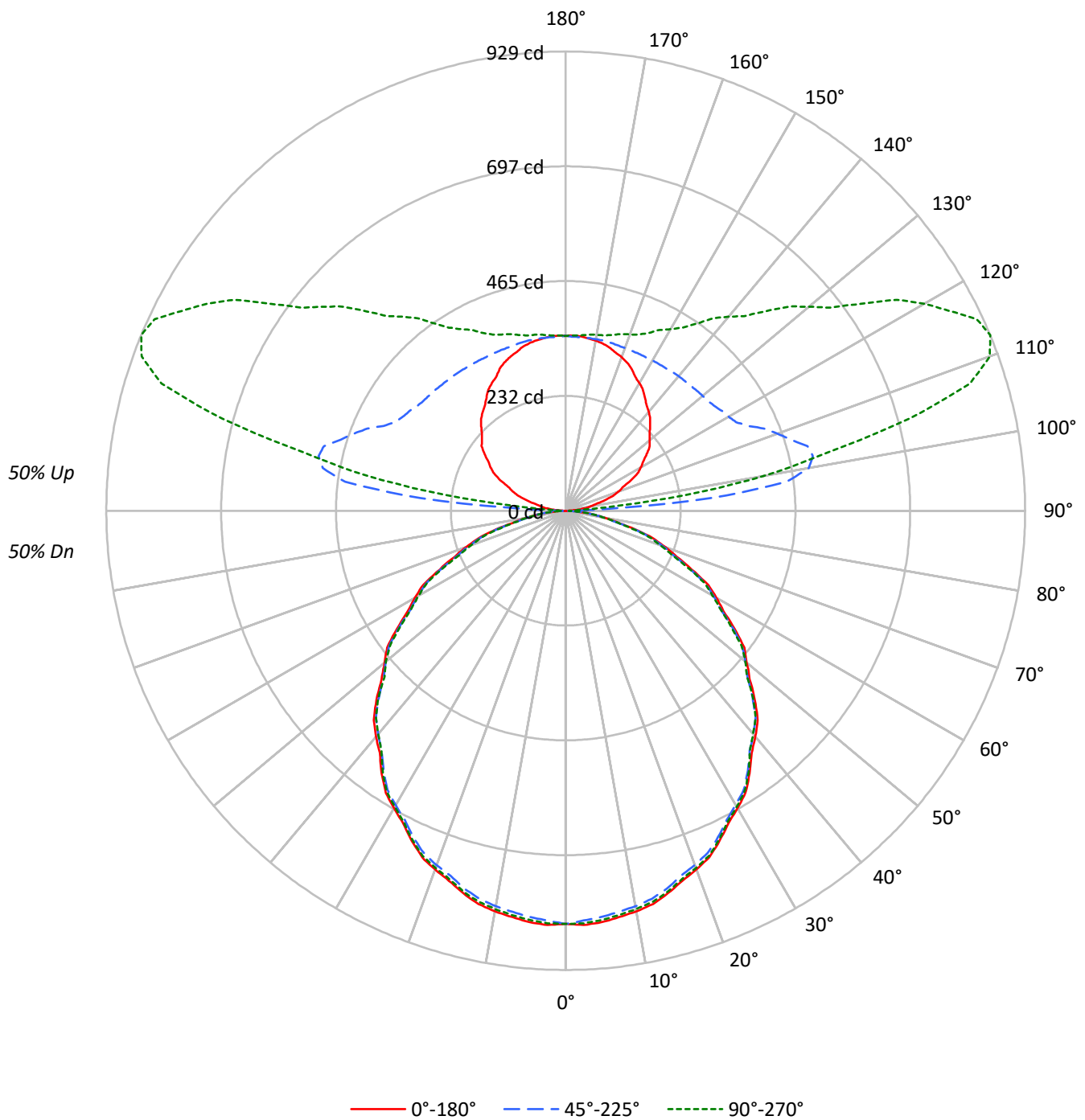
Lumens per Lamp: N/A
Luminaire Lumens: 4587.8 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.5
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				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	83	83	83	69	69	69	56	56	56
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7711	7711	7711
5°	7741	7643	7699
10°	7709	7610	7667
15°	7650	7556	7621
20°	7582	7492	7551
25°	7498	7421	7475
30°	7403	7322	7363
35°	7305	7229	7264
40°	7183	7110	7100
45°	7059	6970	6990
50°	6862	6809	6809
55°	6704	6619	6558
60°	6488	6375	6320
65°	6137	6021	5938
70°	5765	5622	5479
75°	5187	4998	4891
80°	4144	4065	4027
85°	2488	2805	2890

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7059 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	1.7
10°-20°	224.6	4.9
20°-30°	337.4	7.4
30°-40°	402.6	8.8
40°-50°	412.9	9.0
50°-60°	367.9	8.0
60°-70°	274.3	6.0
70°-80°	148.8	3.2
80°-90°	35.1	0.8
90°-100°	166.9	3.6
100°-110°	459.2	10.0
110°-120°	473.9	10.3
120°-130°	379.7	8.3
130°-140°	298.2	6.5
140°-150°	228.6	5.0
150°-160°	164.3	3.6
160°-170°	100.5	2.2
170°-180°	33.9	0.7
0°-30°	640.9	14.0
0°-40°	1043.5	22.7
0°-60°	1824.4	39.8
0°-90°	2282.6	49.8
90°-120°	1100.0	24.0
90°-150°	2006.5	43.7
90°-180°	2305.0	50.2
0°-180°	4587.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	836	834	825	832	831	79
15°	801	800	791	797	798	226
25°	736	736	729	733	734	339
35°	649	647	642	642	645	405
45°	541	539	534	534	536	416
55°	417	416	412	408	408	372
65°	281	281	276	273	272	280
75°	146	142	140	138	137	153
85°	24	25	26	26	27	33
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	835.8	835.8	835.8	835.8	835.8
2.5°	838.8	837.1	829.7	835.8	835.2
5°	835.8	834.3	825.2	832.0	831.3
7.5°	829.0	827.4	818.4	825.2	825.0
10°	822.9	820.7	812.3	819.1	818.4
12.5°	815.0	812.8	804.4	811.2	810.5
15°	800.9	799.5	791.1	797.2	797.9
17.5°	784.9	782.1	774.6	780.5	781.2
20°	772.2	769.9	763.1	768.4	769.1
22.5°	758.8	756.6	749.7	755.0	755.8
25°	736.5	735.8	729.0	732.8	734.3
27.5°	712.4	710.4	704.9	707.8	709.3
30°	694.9	693.4	687.3	689.6	691.1
32.5°	676.7	675.8	670.3	671.4	673.5
35°	648.6	647.2	641.8	641.9	644.9
37.5°	617.6	615.9	611.5	610.8	612.0
40°	596.4	594.1	590.3	589.5	589.5
42.5°	574.5	572.9	567.9	566.5	568.3
45°	541.0	538.8	534.2	534.3	535.7
47.5°	504.8	503.9	498.6	496.2	496.8
50°	478.1	479.6	474.4	471.4	474.4
52.5°	455.1	454.2	449.5	446.5	447.7
55°	416.8	416.0	411.5	407.7	407.7
57.5°	378.3	376.3	371.6	368.8	371.0
60°	351.6	350.9	345.5	340.3	342.5
62.5°	324.9	323.6	318.3	314.8	316.4
65°	281.1	281.1	275.8	272.8	272.0
67.5°	242.8	239.2	236.3	232.6	231.6
70°	213.7	210.7	208.4	205.3	203.1
72.5°	185.2	183.4	179.9	176.9	176.4
75°	145.5	142.5	140.2	137.9	137.2
77.5°	103.5	102.9	100.8	99.6	100.0
80°	78.0	78.0	76.5	76.5	75.8
82.5°	55.0	55.6	55.3	54.1	54.0
85°	23.5	25.0	26.5	26.5	27.3
87.5°	4.4	7.8	7.7	8.0	8.0
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)