

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-6

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-6
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

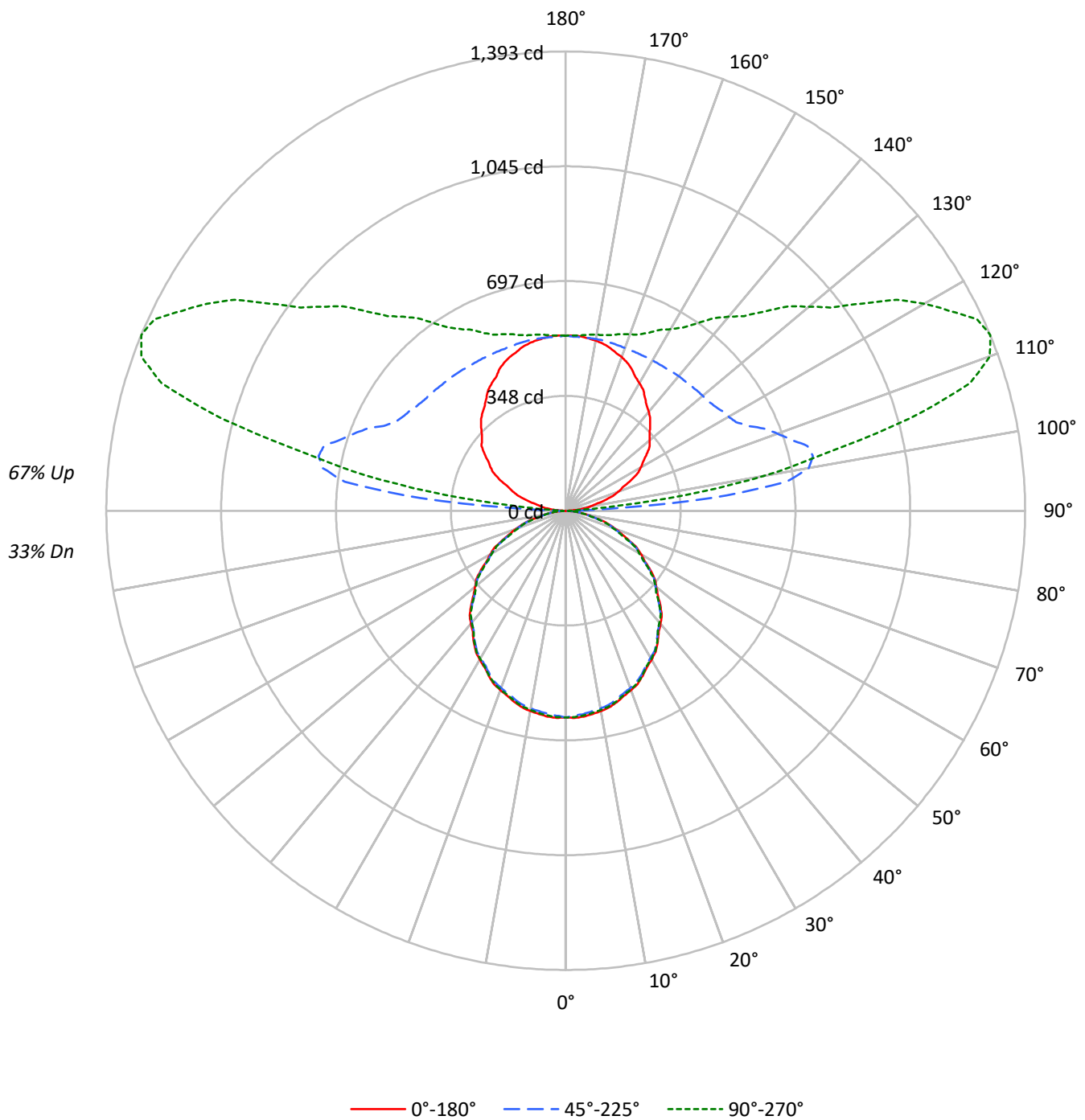
Lumens per Lamp: N/A
Luminaire Lumens: 5170.4 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 68
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

TEST NUMBER:

CATALOG NUMBER: SQ4-F-075U-075D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-F-075U-075D-927-1D-UNV-STD-W-6

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	26	28	24	21	20	18	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14
8	51	39	32	27	46	36	29	24	29	24	20	23	19	16	17	14	13
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3856	3856	3856
5°	3871	3821	3849
10°	3855	3805	3834
15°	3825	3778	3810
20°	3791	3746	3775
25°	3749	3710	3737
30°	3701	3661	3681
35°	3653	3615	3631
40°	3592	3555	3551
45°	3530	3486	3495
50°	3431	3405	3405
55°	3352	3309	3279
60°	3244	3189	3160
65°	3068	3011	2969
70°	2883	2811	2739
75°	2593	2498	2445
80°	2072	2033	2012
85°	1242	1404	1447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3530 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-F-075U-075D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	1.1
10°-20°	168.4	3.3
20°-30°	253.1	4.9
30°-40°	302.0	5.8
40°-50°	309.7	6.0
50°-60°	276.0	5.3
60°-70°	205.8	4.0
70°-80°	111.6	2.2
80°-90°	27.0	0.5
90°-100°	250.3	4.8
100°-110°	688.7	13.3
110°-120°	710.9	13.7
120°-130°	569.6	11.0
130°-140°	447.4	8.7
140°-150°	342.8	6.6
150°-160°	246.5	4.8
160°-170°	150.7	2.9
170°-180°	50.8	1.0
0°-30°	480.7	9.3
0°-40°	782.7	15.1
0°-60°	1368.3	26.5
0°-90°	1712.6	33.1
90°-120°	1650.0	31.9
90°-150°	3009.8	58.2
90°-180°	3458.0	66.9
0°-180°	5170.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	627	626	619	624	623	59
15°	601	600	593	598	598	169
25°	552	552	547	550	551	254
35°	486	485	481	481	484	304
45°	406	404	401	401	402	312
55°	313	312	309	306	306	279
65°	211	211	207	205	204	210
75°	109	107	105	103	103	115
85°	18	19	20	20	20	24
90°	1	4	8	10	10	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

TEST NUMBER:

CATALOG NUMBER: SQ4-F-075U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.9	626.9	626.9	626.9	626.9
2.5°	629.1	627.8	622.3	626.8	626.4
5°	626.9	625.7	618.9	624.0	623.4
7.5°	621.7	620.5	613.8	618.9	618.8
10°	617.2	615.5	609.2	614.3	613.8
12.5°	611.3	609.6	603.3	608.4	607.9
15°	600.7	599.6	593.3	597.9	598.4
17.5°	588.7	586.6	580.9	585.4	585.9
20°	579.1	577.4	572.3	576.3	576.8
22.5°	569.1	567.4	562.3	566.3	566.8
25°	552.4	551.8	546.7	549.6	550.7
27.5°	534.3	532.8	528.6	530.8	531.9
30°	521.1	520.0	515.5	517.2	518.3
32.5°	507.5	506.8	502.7	503.6	505.1
35°	486.5	485.4	481.4	481.4	483.6
37.5°	463.2	462.0	458.6	458.1	459.0
40°	447.3	445.6	442.7	442.2	442.2
42.5°	430.9	429.7	425.9	424.9	426.2
45°	405.8	404.1	400.7	400.7	401.8
47.5°	378.6	377.9	374.0	372.1	372.6
50°	358.6	359.7	355.8	353.5	355.8
52.5°	341.3	340.7	337.1	334.9	335.8
55°	312.6	312.0	308.6	305.8	305.8
57.5°	283.7	282.3	278.7	276.6	278.2
60°	263.7	263.1	259.2	255.2	256.9
62.5°	243.7	242.7	238.7	236.1	237.3
65°	210.8	210.8	206.9	204.6	204.0
67.5°	182.1	179.4	177.2	174.5	173.7
70°	160.3	158.0	156.3	154.0	152.3
72.5°	138.9	137.6	134.9	132.6	132.3
75°	109.1	106.9	105.1	103.4	102.9
77.5°	77.6	77.2	75.6	74.7	75.0
80°	58.5	58.5	57.4	57.4	56.8
82.5°	41.3	41.7	41.5	40.6	40.5
85°	17.6	18.7	19.9	19.9	20.5
87.5°	3.4	6.3	6.6	7.0	7.0
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

TEST NUMBER:

CATALOG NUMBER: SQ4-F-075U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)