

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: P521446

Luminaire Tested: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521446
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5352.6 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

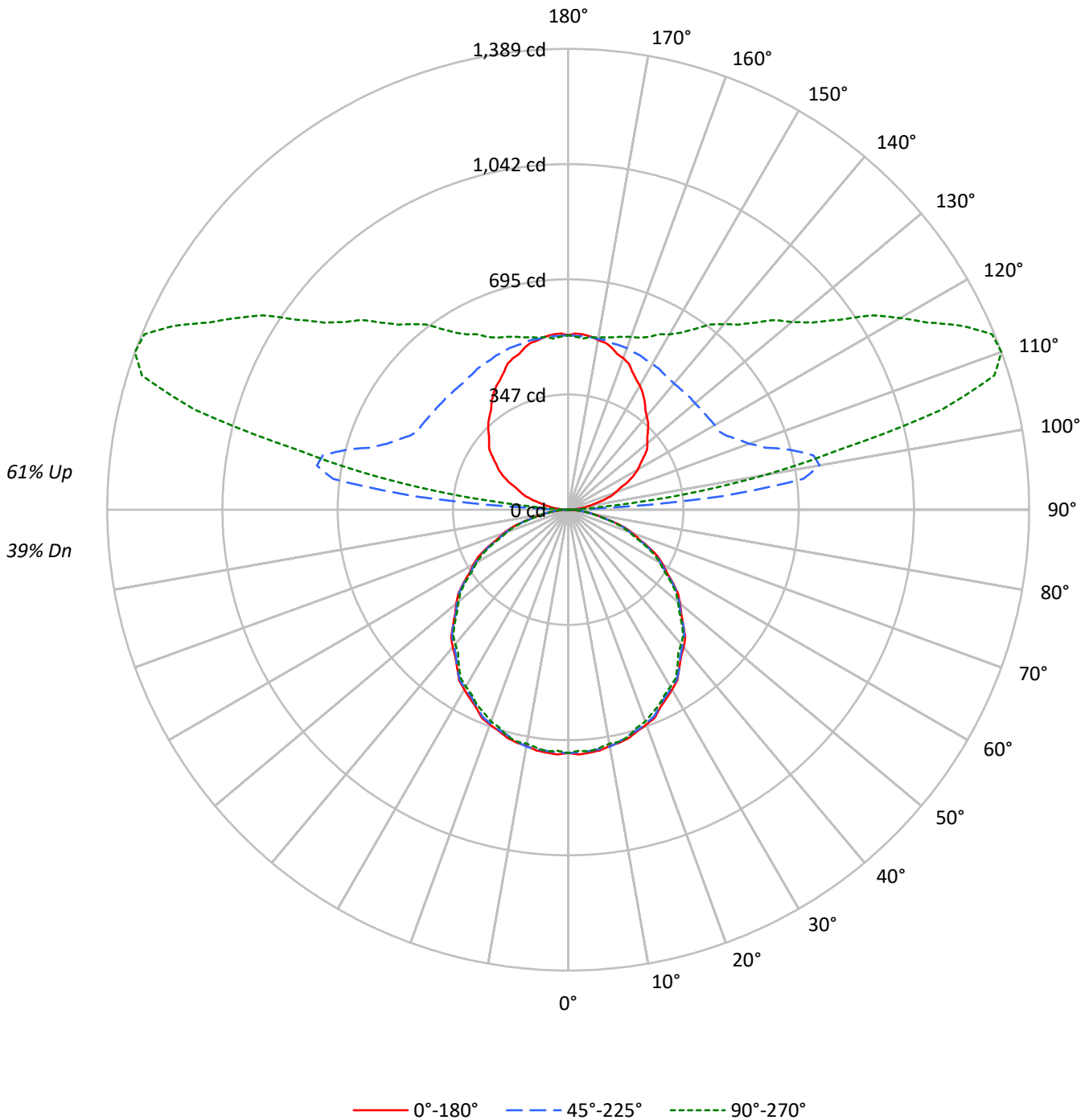
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39																				
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	40	39	33																				
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27																				
3	79	69	62	56	71	63	57	52	52	47	44	41	38	35	31	29	27	23																				
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	25	23	19																				
5	66	54	46	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17																				
6	61	49	41	35	55	45	38	32	37	31	27	29	26	23	23	20	18	15																				
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	21	18	16	13																				
8	52	40	32	27	47	36	30	25	30	25	21	24	20	18	19	16	14	12																				
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10																				
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11	9																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6763	6763	6763
5°	6807	6761	6770
10°	6773	6792	6708
15°	6791	6724	6753
20°	6765	6735	6667
25°	6688	6648	6607
30°	6669	6626	6563
35°	6566	6566	6465
40°	6516	6456	6371
45°	6393	6393	6302
50°	6316	6272	6186
55°	6209	6145	6048
60°	6071	5960	5868
65°	5829	5698	5589
70°	5557	5368	5233
75°	4955	4812	4741
80°	4091	4038	3985
85°	2964	3282	3282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6393 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	1.3
10°-20°	198.8	3.7
20°-30°	300.4	5.6
30°-40°	361.8	6.8
40°-50°	375.1	7.0
50°-60°	340.1	6.4
60°-70°	258.5	4.8
70°-80°	144.0	2.7
80°-90°	37.1	0.7
90°-100°	239.7	4.5
100°-110°	682.0	12.7
110°-120°	653.4	12.2
120°-130°	517.2	9.7
130°-140°	415.1	7.8
140°-150°	325.0	6.1
150°-160°	237.8	4.4
160°-170°	147.3	2.8
170°-180°	50.0	0.9
0°-30°	568.6	10.6
0°-40°	930.4	17.4
0°-60°	1645.7	30.7
0°-90°	2085.3	39.0
90°-120°	1575.1	29.4
90°-150°	2832.3	52.9
90°-180°	3267.0	61.0
0°-180°	5352.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	733	733	733	733	733	
5°	735	726	730	731	731	70
15°	711	704	704	704	707	200
25°	657	652	653	649	649	304
35°	583	577	583	576	574	366
45°	490	487	490	481	483	379
55°	386	385	382	378	376	344
65°	267	266	261	258	256	264
75°	139	137	135	133	133	148
85°	28	30	31	32	31	34
90°	0	0	0	0	0	2
95°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	733.0	733.0	733.0	733.0	733.0
2.5°	738.6	730.8	732.2	732.9	727.4
5°	735.0	726.2	730.0	731.0	731.0
7.5°	731.8	725.0	727.4	724.4	724.0
10°	723.0	720.1	725.0	718.0	716.0
12.5°	719.0	714.5	715.4	714.0	716.0
15°	711.0	704.2	704.0	704.1	707.0
17.5°	698.6	689.8	695.6	689.4	688.6
20°	689.0	680.2	686.0	679.0	679.0
22.5°	679.4	669.0	674.8	665.3	663.0
25°	657.0	652.1	653.0	649.0	649.0
27.5°	641.2	630.4	634.0	628.4	628.8
30°	626.0	615.2	622.0	614.0	616.0
32.5°	610.8	604.0	607.6	598.9	602.4
35°	583.0	577.1	583.0	576.0	574.0
37.5°	558.6	552.5	554.4	549.9	545.0
40°	541.0	534.2	536.0	530.0	529.0
42.5°	521.8	517.3	517.6	512.4	513.0
45°	490.0	487.1	490.0	481.0	483.0
47.5°	461.6	458.1	457.8	451.9	454.2
50°	440.0	438.0	437.0	431.0	431.0
52.5°	417.6	415.6	414.6	410.2	409.4
55°	386.0	385.0	382.0	378.0	376.0
57.5°	351.4	349.4	347.8	343.6	342.0
60°	329.0	327.0	323.0	318.0	318.0
62.5°	304.2	302.2	297.4	295.5	292.4
65°	267.0	266.0	261.0	258.0	256.0
67.5°	230.0	226.9	224.6	220.8	218.8
70°	206.0	202.1	199.0	196.0	194.0
72.5°	179.6	176.5	173.4	171.9	169.2
75°	139.0	137.0	135.0	133.0	133.0
77.5°	101.0	100.4	98.4	98.4	97.4
80°	77.0	78.0	76.0	76.0	75.0
82.5°	55.4	56.4	56.0	56.8	55.8
85°	28.0	30.0	31.0	32.0	31.0
87.5°	8.0	10.3	12.0	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)