

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: P521347

Luminaire Tested: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521347
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-025U-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4308.1 lumens
Efficiency: N/A
Efficacy: 125.2 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: General Diffuse

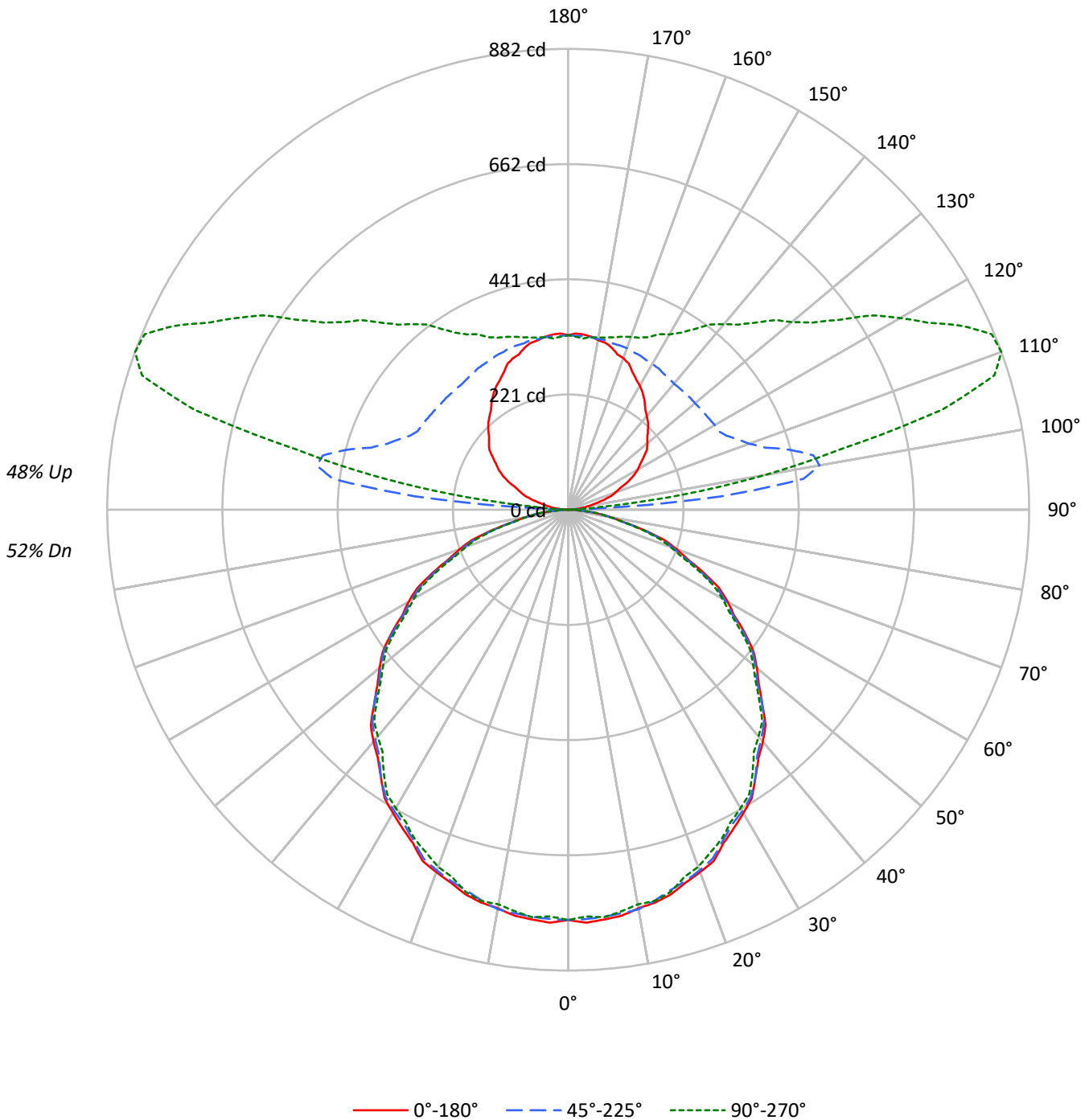
Input Watts (W): 34.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521347

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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	108	108	108	108	99	99	99	99	84	84	84	71	71	71	58	58	58	52				
1	98	94	90	86	91	87	83	80	74	71	69	62	60	58	51	50	49	43				
2	89	82	75	70	82	76	70	66	64	60	57	54	51	49	45	43	41	36				
3	81	72	64	58	75	66	60	55	57	52	48	48	44	41	39	37	34	30				
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	35	32	29	26				
5	68	56	48	42	63	52	45	39	45	39	35	38	34	30	31	28	26	22				
6	63	50	42	36	58	47	40	34	40	35	30	34	30	26	28	25	22	20				
7	58	45	37	32	53	42	35	30	37	31	27	31	27	23	26	22	20	17				
8	54	41	33	28	50	38	31	26	33	28	24	28	24	21	24	20	18	15				
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14				
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7243	7243	7243
5°	7292	7242	7252
10°	7255	7276	7185
15°	7275	7203	7233
20°	7246	7215	7141
25°	7164	7120	7077
30°	7143	7097	7029
35°	7034	7034	6925
40°	6979	6914	6824
45°	6849	6849	6751
50°	6765	6719	6627
55°	6651	6582	6478
60°	6503	6385	6285
65°	6244	6104	5986
70°	5954	5751	5606
75°	5308	5155	5080
80°	4383	4325	4266
85°	3176	3515	3515

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6849 cd/sqm

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CATALOG NUMBER: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	1.7
10°-20°	213.0	4.9
20°-30°	321.8	7.5
30°-40°	387.5	9.0
40°-50°	401.8	9.3
50°-60°	364.3	8.5
60°-70°	276.9	6.4
70°-80°	154.2	3.6
80°-90°	39.8	0.9
90°-100°	152.2	3.5
100°-110°	433.0	10.1
110°-120°	414.9	9.6
120°-130°	328.4	7.6
130°-140°	263.6	6.1
140°-150°	206.3	4.8
150°-160°	151.0	3.5
160°-170°	93.5	2.2
170°-180°	31.7	0.7
0°-30°	609.1	14.1
0°-40°	996.6	23.1
0°-60°	1762.7	40.9
0°-90°	2233.6	51.8
90°-120°	1000.1	23.2
90°-150°	1798.3	41.7
90°-180°	2075.0	48.2
0°-180°	4308.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	787	778	782	783	783	75
15°	762	754	754	754	757	215
25°	704	698	699	695	695	326
35°	624	618	624	617	615	392
45°	525	522	525	515	517	406
55°	414	412	409	405	403	369
65°	286	285	280	276	274	283
75°	149	147	145	142	142	158
85°	30	32	33	34	33	37
90°	0	0	0	0	0	2
95°	16	66	295	102	63	19
105°	67	102	441	779	741	71
115°	125	151	335	709	832	123
125°	176	196	319	530	634	158
135°	216	234	316	448	506	167
145°	255	268	318	388	422	159
155°	291	298	326	350	364	134
165°	321	322	330	337	342	90
175°	336	335	333	331	329	32
180°	334	334	334	334	334	

TEST NUMBER: P521347

CATALOG NUMBER: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	785.1	785.1	785.1	785.1	785.1
2.5°	791.1	782.8	784.3	785.0	779.1
5°	787.3	777.9	781.9	783.0	783.0
7.5°	783.9	776.5	779.1	775.9	775.5
10°	774.4	771.3	776.6	769.0	766.9
12.5°	770.1	765.3	766.3	764.8	766.9
15°	761.6	754.2	754.1	754.1	757.3
17.5°	748.3	738.9	745.1	738.4	737.6
20°	738.0	728.6	734.8	727.3	727.3
22.5°	727.7	716.6	722.8	712.7	710.2
25°	703.7	698.5	699.4	695.2	695.2
27.5°	686.8	675.3	679.1	673.1	673.5
30°	670.5	659.0	666.2	657.7	659.8
32.5°	654.2	646.9	650.8	641.5	645.2
35°	624.5	618.2	624.5	616.9	614.8
37.5°	598.3	591.8	593.8	589.0	583.8
40°	579.5	572.1	574.1	567.7	566.6
42.5°	558.9	554.1	554.4	548.9	549.5
45°	524.9	521.7	524.9	515.3	517.4
47.5°	494.4	490.7	490.4	484.0	486.5
50°	471.3	469.2	468.1	461.7	461.7
52.5°	447.3	445.2	444.1	439.4	438.5
55°	413.5	412.4	409.2	404.8	402.7
57.5°	376.4	374.3	372.5	368.0	366.3
60°	352.4	350.3	346.0	340.6	340.6
62.5°	325.8	323.7	318.6	316.5	313.2
65°	286.0	284.9	279.6	276.3	274.2
67.5°	246.4	243.0	240.6	236.5	234.4
70°	220.7	216.5	213.2	209.9	207.8
72.5°	192.4	189.0	185.7	184.2	181.2
75°	148.9	146.8	144.6	142.5	142.5
77.5°	108.2	107.6	105.4	105.4	104.3
80°	82.5	83.5	81.4	81.4	80.3
82.5°	59.3	60.4	60.0	60.8	59.8
85°	30.0	32.1	33.2	34.3	33.2
87.5°	8.6	11.1	12.9	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.1	26.9	62.5	18.2	13.7
95°	16.5	65.6	294.6	102.0	62.9
97.5°	30.3	76.8	453.7	324.7	222.5
100°	40.0	83.5	488.3	494.6	381.0
102.5°	50.7	90.6	480.6	633.0	533.8
105°	67.3	102.1	441.3	779.4	740.9
107.5°	84.2	115.4	395.3	820.7	855.0
110°	95.9	125.1	368.9	804.9	881.9

TEST NUMBER: P521347

CATALOG NUMBER: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.0	134.7	351.1	767.6	877.3
115°	125.1	151.2	334.6	708.8	832.4
117.5°	141.0	165.4	324.8	644.6	775.5
120°	153.7	174.1	323.8	607.9	733.3
122.5°	163.8	184.3	321.3	575.7	692.2
125°	176.5	195.8	319.4	530.0	633.6
127.5°	190.3	208.4	318.3	502.6	588.1
130°	197.5	215.5	316.8	483.6	558.1
132.5°	205.1	222.6	316.8	468.7	537.3
135°	215.9	233.9	315.6	447.7	506.0
137.5°	226.0	243.5	315.4	429.8	480.3
140°	233.7	251.7	314.9	415.1	463.5
142.5°	242.3	257.3	316.4	403.3	446.7
145°	254.6	267.6	318.1	387.5	422.2
147.5°	265.1	277.8	320.9	371.5	401.5
150°	274.3	283.0	321.9	366.2	387.3
152.5°	281.4	290.6	322.9	359.0	378.7
155°	290.8	297.6	325.7	350.2	364.4
157.5°	302.5	306.6	326.3	346.1	356.3
160°	308.6	311.7	328.9	343.1	351.7
162.5°	312.1	315.7	329.4	340.5	347.2
165°	321.3	322.5	329.5	336.6	341.6
167.5°	327.5	326.4	332.4	335.7	337.6
170°	329.5	328.9	331.4	332.1	334.6
172.5°	334.1	332.0	333.0	331.1	333.1
175°	336.5	334.6	333.3	331.4	328.9
177.5°	337.5	334.5	333.0	330.9	331.4
180°	334.0	334.0	334.0	334.0	334.0

(END OF REPORT)