

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: P521344

Luminaire Tested: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521344
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4161.6 lumens
Efficiency: N/A
Efficacy: 119.9 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

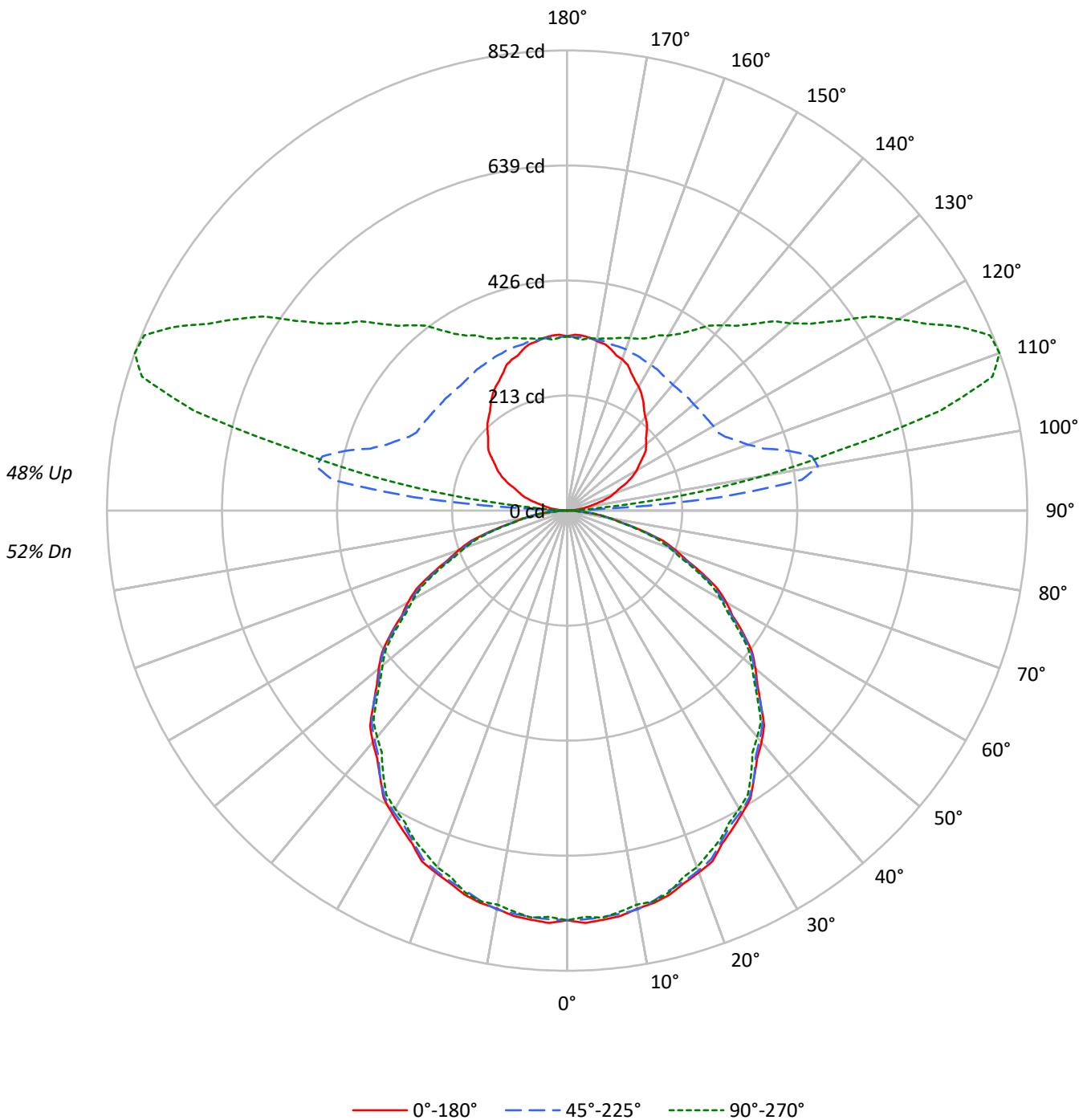
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	6997	6997	6997
5°	7043	6995	7005
10°	7009	7028	6941
15°	7027	6957	6987
20°	6999	6969	6898
25°	6920	6879	6836
30°	6900	6857	6791
35°	6794	6794	6689
40°	6742	6680	6593
45°	6615	6615	6521
50°	6535	6491	6402
55°	6425	6359	6259
60°	6281	6167	6071
65°	6032	5897	5783
70°	5751	5554	5414
75°	5126	4980	4905
80°	4235	4176	4123
85°	3070	3398	3398

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6615 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	1.7
10°-20°	205.7	4.9
20°-30°	310.8	7.5
30°-40°	374.4	9.0
40°-50°	388.1	9.3
50°-60°	351.9	8.5
60°-70°	267.5	6.4
70°-80°	149.0	3.6
80°-90°	38.4	0.9
90°-100°	147.0	3.5
100°-110°	418.3	10.1
110°-120°	400.8	9.6
120°-130°	317.2	7.6
130°-140°	254.6	6.1
140°-150°	199.3	4.8
150°-160°	145.8	3.5
160°-170°	90.3	2.2
170°-180°	30.7	0.7
0°-30°	588.3	14.1
0°-40°	962.7	23.1
0°-60°	1702.8	40.9
0°-90°	2157.6	51.8
90°-120°	966.1	23.2
90°-150°	1737.2	41.7
90°-180°	2004.0	48.2
0°-180°	4161.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	760	751	755	756	756	72
15°	736	729	728	728	732	207
25°	680	675	676	672	672	315
35°	603	597	603	596	594	378
45°	507	504	507	498	500	392
55°	399	398	395	391	389	356
65°	276	275	270	267	265	274
75°	144	142	140	138	138	153
85°	29	31	32	33	32	35
90°	0	0	0	0	0	2
95°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.4	758.4	758.4	758.4	758.4
2.5°	764.2	756.1	757.6	758.3	752.7
5°	760.5	751.4	755.3	756.4	756.4
7.5°	757.2	750.1	752.7	749.5	749.1
10°	748.1	745.1	750.2	742.9	740.9
12.5°	744.0	739.3	740.2	738.8	740.9
15°	735.7	728.6	728.4	728.5	731.5
17.5°	722.9	713.7	719.7	713.3	712.5
20°	712.9	703.8	709.8	702.6	702.6
22.5°	703.0	692.3	698.2	688.4	686.0
25°	679.8	674.8	675.7	671.5	671.5
27.5°	663.5	652.3	656.0	650.2	650.6
30°	647.7	636.6	643.6	635.4	637.4
32.5°	632.0	624.9	628.7	619.7	623.3
35°	603.2	597.2	603.2	596.0	593.9
37.5°	578.0	571.7	573.6	569.0	563.9
40°	559.8	552.7	554.6	548.4	547.4
42.5°	539.9	535.3	535.6	530.2	530.8
45°	507.0	504.0	507.0	497.7	499.8
47.5°	477.6	474.0	473.7	467.5	470.0
50°	455.3	453.3	452.2	446.0	446.0
52.5°	432.1	430.1	429.0	424.4	423.6
55°	399.4	398.4	395.3	391.1	389.1
57.5°	363.6	361.6	359.9	355.5	353.9
60°	340.4	338.4	334.2	329.0	329.0
62.5°	314.8	312.7	307.7	305.8	302.6
65°	276.3	275.3	270.1	266.9	264.9
67.5°	238.0	234.7	232.4	228.4	226.4
70°	213.2	209.1	205.9	202.8	200.7
72.5°	185.8	182.6	179.4	177.9	175.1
75°	143.8	141.8	139.7	137.6	137.6
77.5°	104.5	103.9	101.8	101.8	100.8
80°	79.7	80.7	78.6	78.6	77.6
82.5°	57.3	58.3	57.9	58.7	57.7
85°	29.0	31.0	32.1	33.1	32.1
87.5°	8.3	10.7	12.4	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)