

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: P521396

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521396
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-050U-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 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: 4416.2 lumens
Efficiency: N/A
Efficacy: 121.0 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

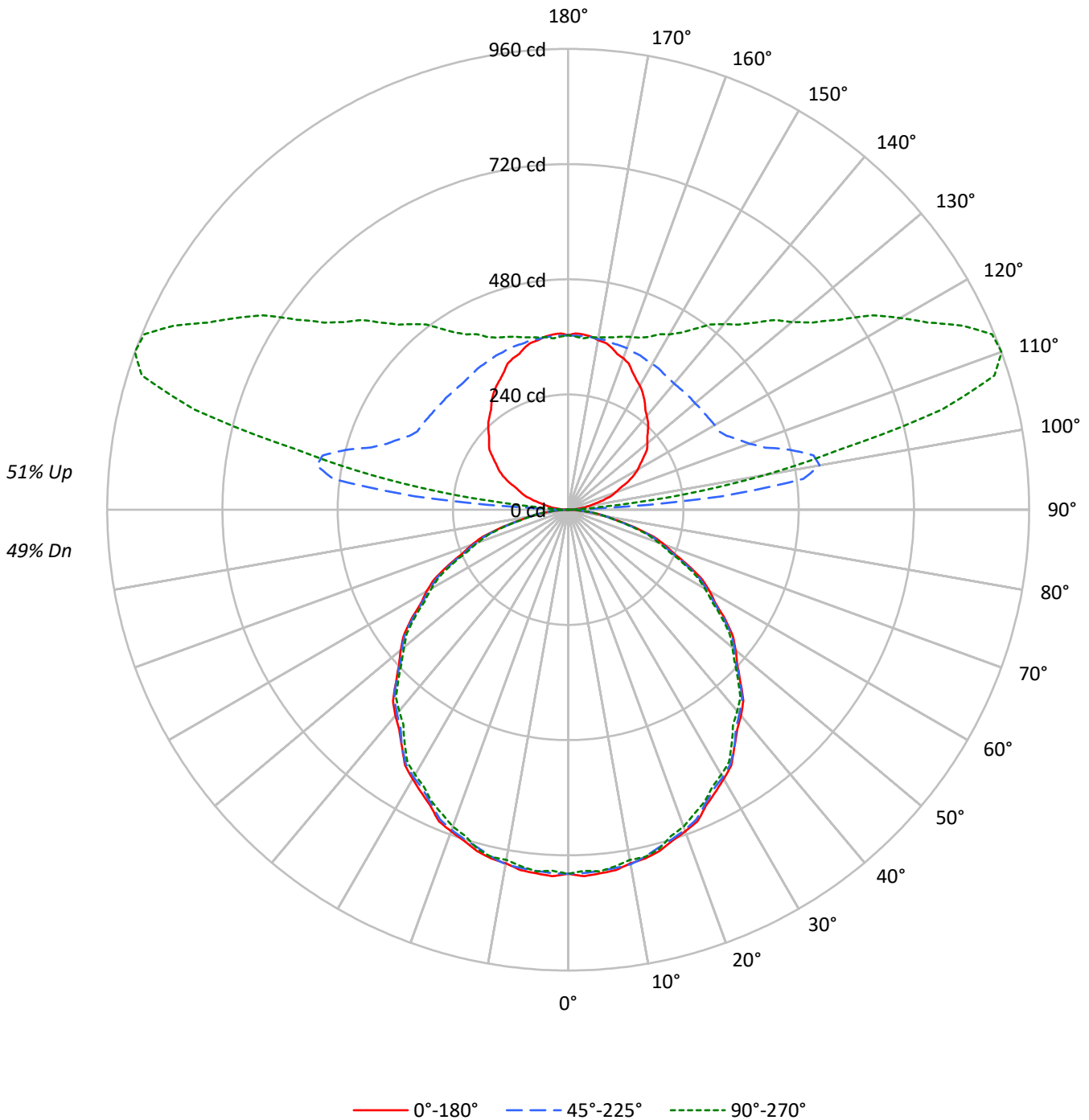
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49																				
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41																				
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34																				
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29																				
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24																				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21																				
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18																				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16																				
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14																				
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13																				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	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	1.6
10°-20°	205.7	4.7
20°-30°	310.8	7.0
30°-40°	374.4	8.5
40°-50°	388.1	8.8
50°-60°	351.9	8.0
60°-70°	267.5	6.1
70°-80°	149.0	3.4
80°-90°	38.4	0.9
90°-100°	165.7	3.8
100°-110°	471.4	10.7
110°-120°	451.7	10.2
120°-130°	357.5	8.1
130°-140°	286.9	6.5
140°-150°	224.6	5.1
150°-160°	164.4	3.7
160°-170°	101.8	2.3
170°-180°	34.5	0.8
0°-30°	588.3	13.3
0°-40°	962.7	21.8
0°-60°	1702.8	38.6
0°-90°	2157.6	48.9
90°-120°	1088.8	24.7
90°-150°	1957.8	44.3
90°-180°	2259.0	51.2
0°-180°	4416.2	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°	18	71	321	111	68	21
105°	73	111	480	849	807	78
115°	136	165	364	772	906	134
125°	192	213	348	577	690	172
135°	235	255	344	487	551	181
145°	277	291	346	422	460	173
155°	317	324	355	381	397	146
165°	350	351	359	366	372	98
175°	366	364	363	361	358	35
180°	364	364	364	364	364	

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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°	5.5	29.3	68.0	19.8	14.9
95°	18.0	71.4	320.7	111.0	68.4
97.5°	33.0	83.6	494.0	353.5	242.2
100°	43.5	90.9	531.6	538.4	414.7
102.5°	55.2	98.7	523.3	689.2	581.2
105°	73.3	111.1	480.4	848.6	806.7
107.5°	91.7	125.6	430.4	893.5	930.8
110°	104.4	136.1	401.6	876.3	960.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	116.5	146.7	382.3	835.7	955.2
115°	136.2	164.6	364.3	771.7	906.2
117.5°	153.5	180.1	353.6	701.8	844.3
120°	167.3	189.6	352.5	661.9	798.4
122.5°	178.3	200.6	349.8	626.8	753.6
125°	192.2	213.1	347.7	577.0	689.9
127.5°	207.2	226.8	346.6	547.2	640.2
130°	215.0	234.6	344.9	526.5	607.6
132.5°	223.3	242.3	344.9	510.3	584.9
135°	235.0	254.6	343.5	487.4	550.9
137.5°	246.1	265.1	343.4	468.0	522.9
140°	254.4	274.0	342.9	451.9	504.6
142.5°	263.8	280.1	344.5	439.0	486.4
145°	277.2	291.4	346.3	421.8	459.7
147.5°	288.7	302.4	349.4	404.4	437.1
150°	298.6	308.1	350.5	398.7	421.7
152.5°	306.4	316.4	351.6	390.9	412.3
155°	316.6	324.0	354.6	381.2	396.8
157.5°	329.3	333.8	355.3	376.8	387.9
160°	335.9	339.3	358.1	373.5	382.9
162.5°	339.8	343.7	358.6	370.7	378.0
165°	349.8	351.1	358.8	366.5	371.9
167.5°	356.5	355.3	361.9	365.4	367.6
170°	358.8	358.1	360.8	361.6	364.3
172.5°	363.7	361.4	362.5	360.5	362.6
175°	366.4	364.3	362.9	360.8	358.1
177.5°	367.5	364.2	362.5	360.3	360.8
180°	363.6	363.6	363.6	363.6	363.6

(END OF REPORT)