

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: P521448

Luminaire Tested: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521448
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5538.4 lumens
Efficiency: N/A
Efficacy: 124.7 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

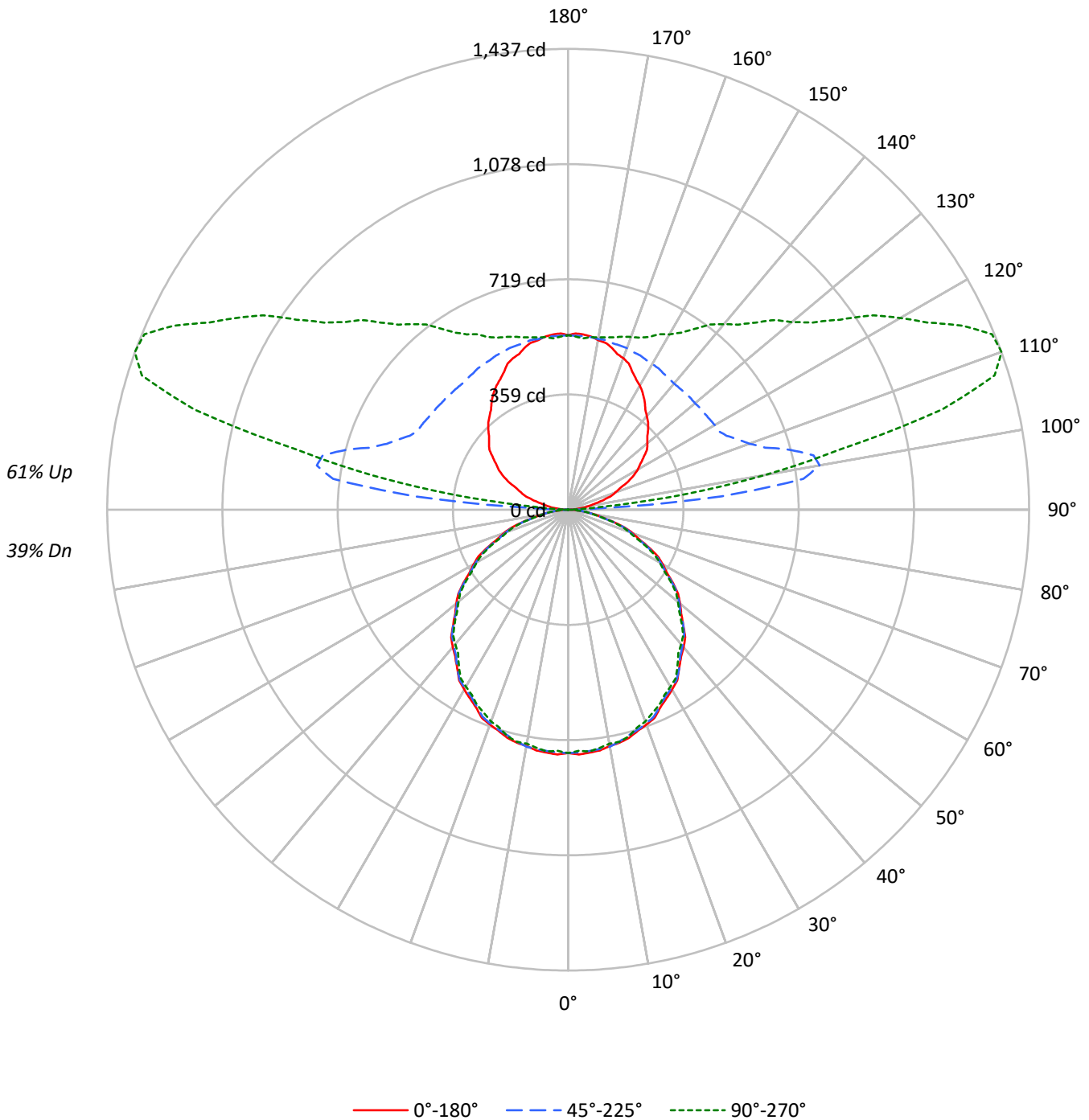
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	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	1.3
10°-20°	205.7	3.7
20°-30°	310.8	5.6
30°-40°	374.4	6.8
40°-50°	388.1	7.0
50°-60°	351.9	6.4
60°-70°	267.5	4.8
70°-80°	149.0	2.7
80°-90°	38.4	0.7
90°-100°	248.0	4.5
100°-110°	705.7	12.7
110°-120°	676.1	12.2
120°-130°	535.1	9.7
130°-140°	429.5	7.8
140°-150°	336.2	6.1
150°-160°	246.0	4.4
160°-170°	152.4	2.8
170°-180°	51.7	0.9
0°-30°	588.3	10.6
0°-40°	962.7	17.4
0°-60°	1702.8	30.7
0°-90°	2157.6	39.0
90°-120°	1629.8	29.4
90°-150°	2930.6	52.9
90°-180°	3381.0	61.0
0°-180°	5538.4	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°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

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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°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)