

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: P521340

Luminaire Tested: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521340
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3848.0 lumens
Efficiency: N/A
Efficacy: 111.2 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

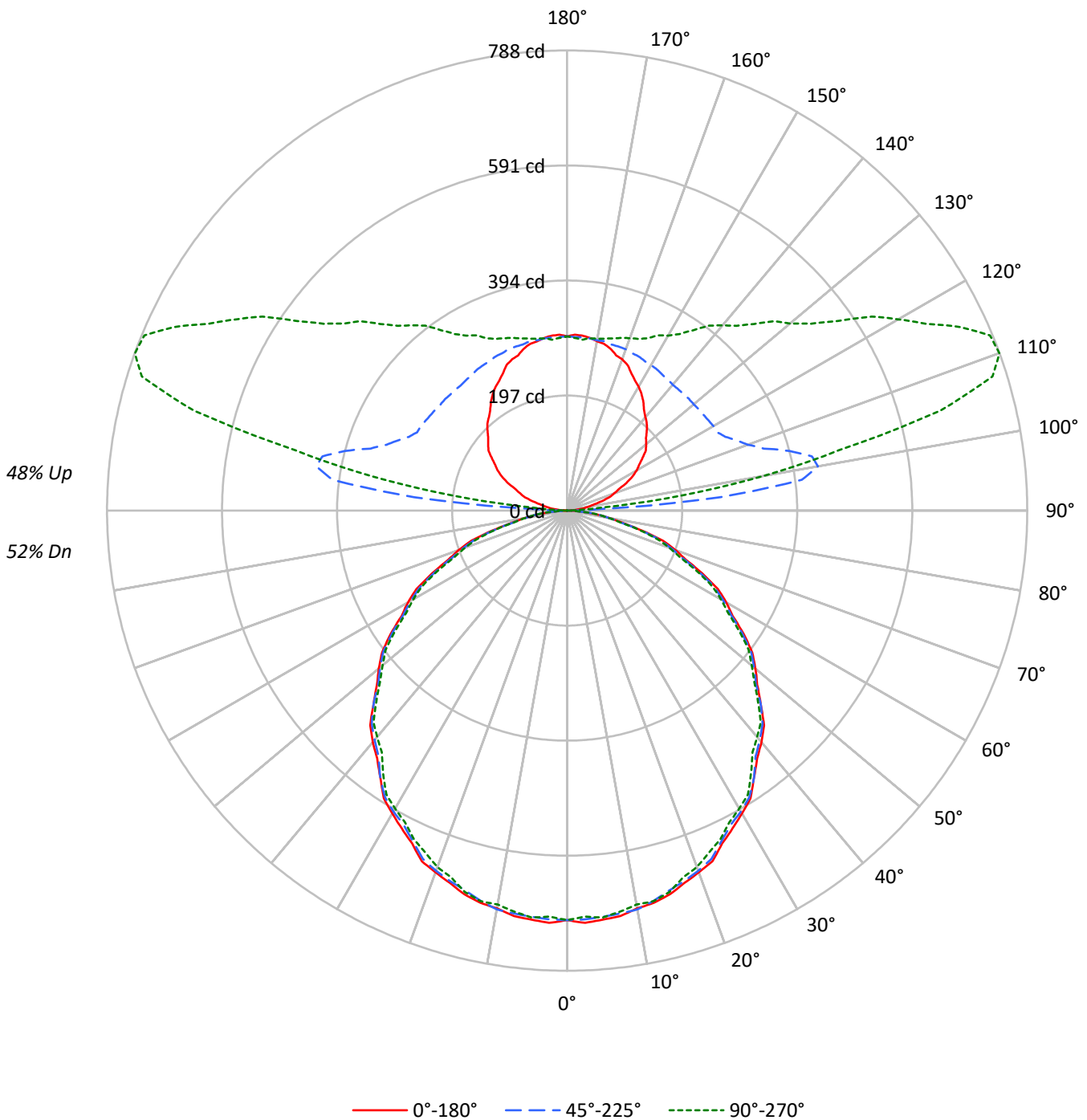
Input Watts (W): 34.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	6470	6470	6470
5°	6513	6468	6477
10°	6480	6498	6417
15°	6497	6433	6461
20°	6472	6444	6378
25°	6399	6359	6321
30°	6380	6340	6278
35°	6283	6283	6186
40°	6234	6176	6095
45°	6117	6117	6029
50°	6043	6001	5919
55°	5940	5879	5786
60°	5809	5702	5613
65°	5576	5451	5346
70°	5317	5136	5007
75°	4741	4606	4534
80°	3916	3863	3815
85°	2837	3144	3144

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6117 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	1.7
10°-20°	190.2	4.9
20°-30°	287.4	7.5
30°-40°	346.2	9.0
40°-50°	358.9	9.3
50°-60°	325.4	8.5
60°-70°	247.3	6.4
70°-80°	137.7	3.6
80°-90°	35.5	0.9
90°-100°	135.9	3.5
100°-110°	386.8	10.1
110°-120°	370.6	9.6
120°-130°	293.3	7.6
130°-140°	235.4	6.1
140°-150°	184.3	4.8
150°-160°	134.8	3.5
160°-170°	83.5	2.2
170°-180°	28.3	0.7
0°-30°	544.0	14.1
0°-40°	890.2	23.1
0°-60°	1574.5	40.9
0°-90°	1995.0	51.8
90°-120°	893.2	23.2
90°-150°	1606.2	41.7
90°-180°	1853.0	48.2
0°-180°	3848.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	703	695	698	699	699	67
15°	680	674	674	674	676	192
25°	629	624	625	621	621	291
35°	558	552	558	551	549	350
45°	469	466	469	460	462	363
55°	369	368	366	362	360	329
65°	255	254	250	247	245	253
75°	133	131	129	127	127	141
85°	27	29	30	31	30	33
90°	0	0	0	0	0	2
95°	15	59	263	91	56	17
105°	60	91	394	696	662	64
115°	112	135	299	633	744	110
125°	158	175	285	473	566	141
135°	193	209	282	400	452	149
145°	227	239	284	346	377	142
155°	260	266	291	313	326	120
165°	287	288	294	301	305	81
175°	301	299	298	296	294	28
180°	298	298	298	298	298	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.3	701.3	701.3	701.3	701.3
2.5°	706.6	699.2	700.5	701.2	695.9
5°	703.2	694.8	698.4	699.4	699.4
7.5°	700.1	693.6	695.9	693.1	692.7
10°	691.7	688.9	693.6	686.9	685.0
12.5°	687.9	683.6	684.4	683.2	685.0
15°	680.2	673.7	673.5	673.6	676.4
17.5°	668.4	660.0	665.5	659.6	658.8
20°	659.2	650.8	656.3	649.6	649.6
22.5°	650.0	640.1	645.6	636.6	634.3
25°	628.6	623.9	624.7	620.9	620.9
27.5°	613.5	603.2	606.6	601.2	601.6
30°	598.9	588.6	595.1	587.5	589.3
32.5°	584.4	577.8	581.3	573.0	576.3
35°	557.8	552.2	557.8	551.0	549.2
37.5°	534.4	528.6	530.4	526.1	521.4
40°	517.6	511.0	512.8	507.0	506.1
42.5°	499.2	494.9	495.2	490.2	490.8
45°	468.8	466.0	468.8	460.2	462.1
47.5°	441.6	438.3	438.0	432.3	434.5
50°	421.0	419.1	418.1	412.4	412.4
52.5°	399.5	397.7	396.7	392.4	391.7
55°	369.3	368.4	365.5	361.6	359.7
57.5°	336.2	334.3	332.8	328.7	327.2
60°	314.8	312.9	309.0	304.2	304.2
62.5°	291.0	289.2	284.5	282.7	279.7
65°	255.4	254.5	249.7	246.8	244.9
67.5°	220.0	217.1	214.9	211.2	209.3
70°	197.1	193.3	190.4	187.5	185.6
72.5°	171.8	168.8	165.9	164.5	161.9
75°	133.0	131.1	129.2	127.2	127.2
77.5°	96.6	96.1	94.1	94.1	93.2
80°	73.7	74.6	72.7	72.7	71.8
82.5°	53.0	53.9	53.6	54.3	53.4
85°	26.8	28.7	29.7	30.6	29.7
87.5°	7.7	9.9	11.5	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.5	24.1	55.8	16.2	12.2
95°	14.7	58.6	263.1	91.1	56.1
97.5°	27.1	68.6	405.3	290.0	198.7
100°	35.7	74.5	436.1	441.7	340.3
102.5°	45.3	81.0	429.3	565.4	476.8
105°	60.1	91.2	394.1	696.2	661.8
107.5°	75.2	103.0	353.1	733.1	763.7
110°	85.6	111.7	329.5	719.0	787.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.6	120.3	313.6	685.6	783.6
115°	111.7	135.0	298.9	633.1	743.5
117.5°	125.9	147.7	290.1	575.8	692.7
120°	137.2	155.5	289.2	543.0	655.0
122.5°	146.3	164.6	287.0	514.2	618.3
125°	157.7	174.8	285.3	473.4	566.0
127.5°	170.0	186.1	284.3	449.0	525.3
130°	176.4	192.5	283.0	431.9	498.5
132.5°	183.2	198.8	283.0	418.7	479.9
135°	192.8	208.9	281.9	399.9	452.0
137.5°	201.9	217.5	281.7	383.9	429.0
140°	208.7	224.8	281.3	370.7	414.0
142.5°	216.4	229.8	282.6	360.2	399.0
145°	227.4	239.1	284.1	346.1	377.1
147.5°	236.8	248.1	286.6	331.8	358.6
150°	245.0	252.8	287.5	327.1	345.9
152.5°	251.3	259.6	288.4	320.7	338.2
155°	259.7	265.8	290.9	312.8	325.5
157.5°	270.2	273.8	291.5	309.2	318.3
160°	275.6	278.4	293.8	306.4	314.2
162.5°	278.8	282.0	294.2	304.1	310.1
165°	287.0	288.1	294.3	300.7	305.1
167.5°	292.5	291.5	296.9	299.8	301.6
170°	294.3	293.8	296.0	296.6	298.9
172.5°	298.4	296.5	297.4	295.7	297.5
175°	300.6	298.9	297.7	296.0	293.8
177.5°	301.5	298.8	297.4	295.6	296.0
180°	298.3	298.3	298.3	298.3	298.3

(END OF REPORT)