

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: P521392

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521392
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4083.3 lumens
Efficiency: N/A
Efficacy: 112.2 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

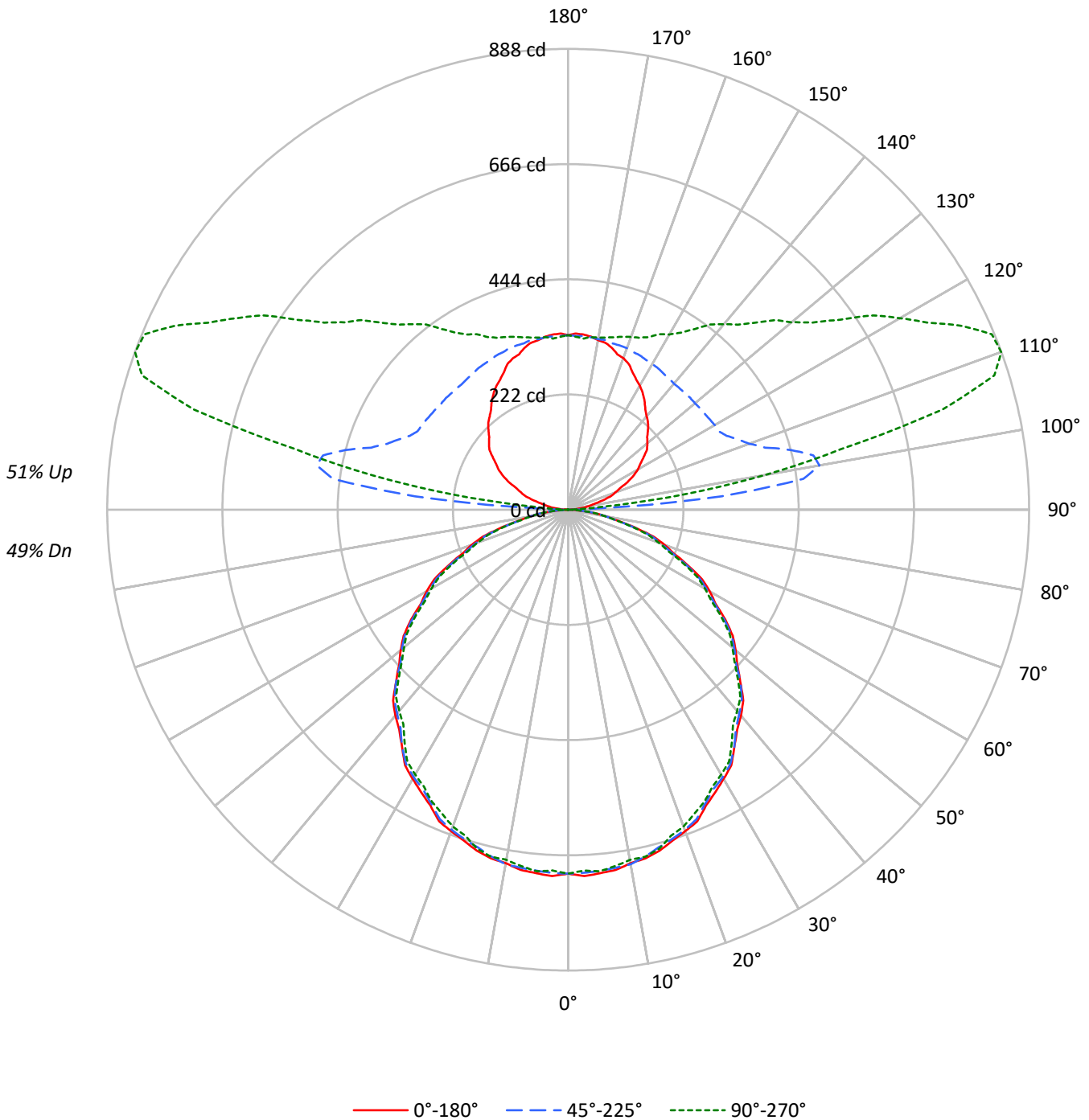
Input Watts (W): 36.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	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	1.6
10°-20°	190.2	4.7
20°-30°	287.4	7.0
30°-40°	346.2	8.5
40°-50°	358.9	8.8
50°-60°	325.4	8.0
60°-70°	247.3	6.1
70°-80°	137.7	3.4
80°-90°	35.5	0.9
90°-100°	153.2	3.8
100°-110°	435.9	10.7
110°-120°	417.6	10.2
120°-130°	330.5	8.1
130°-140°	265.3	6.5
140°-150°	207.7	5.1
150°-160°	152.0	3.7
160°-170°	94.1	2.3
170°-180°	31.9	0.8
0°-30°	544.0	13.3
0°-40°	890.2	21.8
0°-60°	1574.5	38.6
0°-90°	1995.0	48.9
90°-120°	1006.7	24.7
90°-150°	1810.2	44.3
90°-180°	2088.0	51.1
0°-180°	4083.3	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°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

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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°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)