

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: P521394

Luminaire Tested: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521394
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4268.0 lumens
Efficiency: N/A
Efficacy: 116.9 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

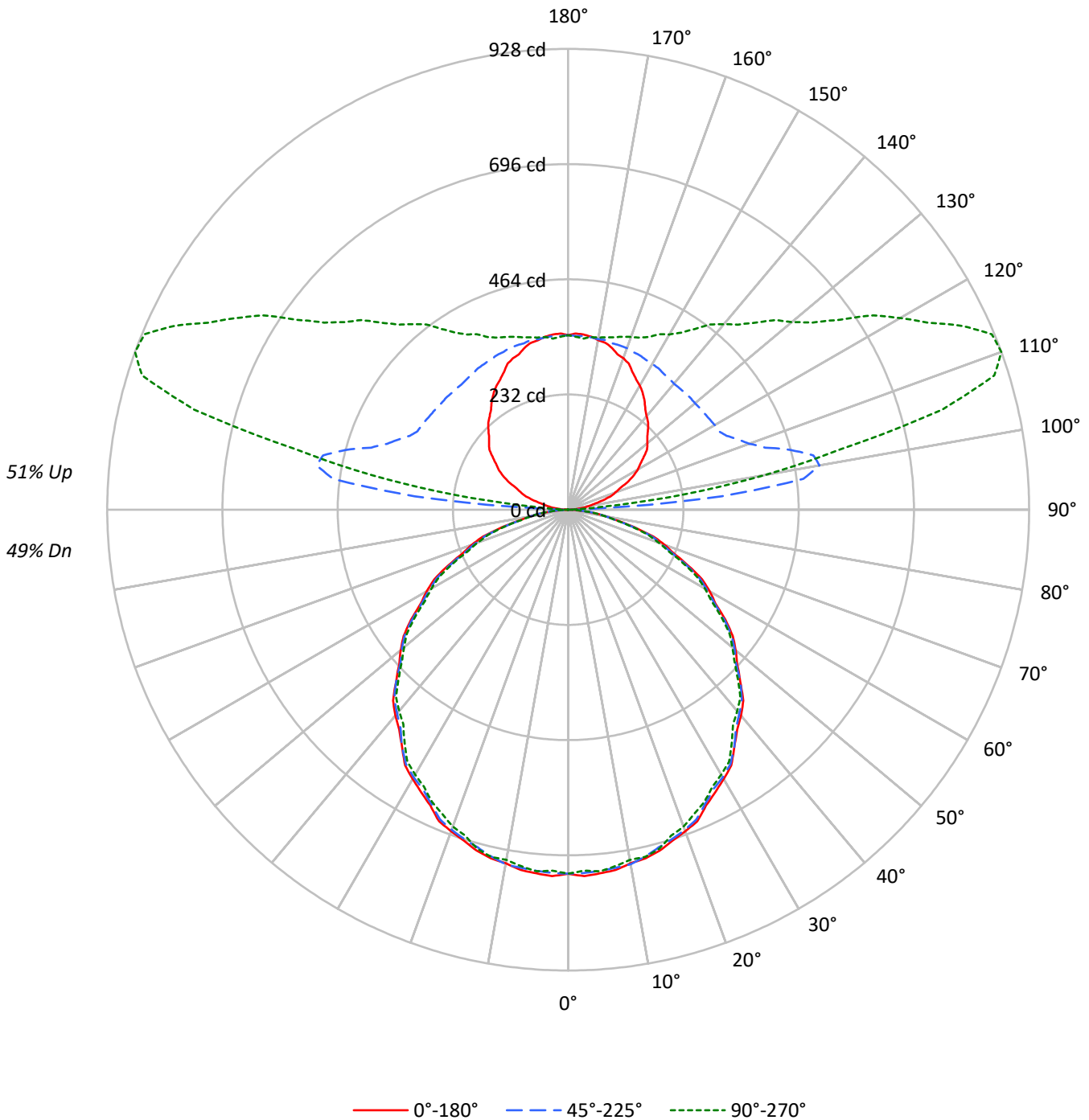
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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°	6763	6763	6763
5°	6807	6761	6770
10°	6773	6792	6708
15°	6791	6724	6753
20°	6765	6735	6667
25°	6688	6648	6607
30°	6669	6626	6563
35°	6566	6566	6465
40°	6516	6456	6371
45°	6393	6393	6302
50°	6316	6272	6186
55°	6209	6145	6048
60°	6071	5960	5868
65°	5829	5698	5589
70°	5557	5368	5233
75°	4955	4812	4741
80°	4091	4038	3985
85°	2964	3282	3282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6393 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	1.6
10°-20°	198.8	4.7
20°-30°	300.4	7.0
30°-40°	361.8	8.5
40°-50°	375.1	8.8
50°-60°	340.1	8.0
60°-70°	258.5	6.1
70°-80°	144.0	3.4
80°-90°	37.1	0.9
90°-100°	160.1	3.8
100°-110°	455.6	10.7
110°-120°	436.5	10.2
120°-130°	345.5	8.1
130°-140°	277.3	6.5
140°-150°	217.1	5.1
150°-160°	158.8	3.7
160°-170°	98.4	2.3
170°-180°	33.4	0.8
0°-30°	568.6	13.3
0°-40°	930.4	21.8
0°-60°	1645.7	38.6
0°-90°	2085.3	48.9
90°-120°	1052.2	24.7
90°-150°	1892.1	44.3
90°-180°	2183.0	51.1
0°-180°	4268.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	733	733	733	733	733	
5°	735	726	730	731	731	70
15°	711	704	704	704	707	200
25°	657	652	653	649	649	304
35°	583	577	583	576	574	366
45°	490	487	490	481	483	379
55°	386	385	382	378	376	344
65°	267	266	261	258	256	264
75°	139	137	135	133	133	148
85°	28	30	31	32	31	34
90°	0	0	0	0	0	2
95°	17	69	310	107	66	20
105°	71	107	464	820	780	75
115°	132	159	352	746	876	130
125°	186	206	336	558	667	166
135°	227	246	332	471	532	175
145°	268	282	335	408	444	167
155°	306	313	343	368	384	141
165°	338	339	347	354	359	95
175°	354	352	351	349	346	34
180°	351	351	351	351	351	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	733.0	733.0	733.0	733.0	733.0
2.5°	738.6	730.8	732.2	732.9	727.4
5°	735.0	726.2	730.0	731.0	731.0
7.5°	731.8	725.0	727.4	724.4	724.0
10°	723.0	720.1	725.0	718.0	716.0
12.5°	719.0	714.5	715.4	714.0	716.0
15°	711.0	704.2	704.0	704.1	707.0
17.5°	698.6	689.8	695.6	689.4	688.6
20°	689.0	680.2	686.0	679.0	679.0
22.5°	679.4	669.0	674.8	665.3	663.0
25°	657.0	652.1	653.0	649.0	649.0
27.5°	641.2	630.4	634.0	628.4	628.8
30°	626.0	615.2	622.0	614.0	616.0
32.5°	610.8	604.0	607.6	598.9	602.4
35°	583.0	577.1	583.0	576.0	574.0
37.5°	558.6	552.5	554.4	549.9	545.0
40°	541.0	534.2	536.0	530.0	529.0
42.5°	521.8	517.3	517.6	512.4	513.0
45°	490.0	487.1	490.0	481.0	483.0
47.5°	461.6	458.1	457.8	451.9	454.2
50°	440.0	438.0	437.0	431.0	431.0
52.5°	417.6	415.6	414.6	410.2	409.4
55°	386.0	385.0	382.0	378.0	376.0
57.5°	351.4	349.4	347.8	343.6	342.0
60°	329.0	327.0	323.0	318.0	318.0
62.5°	304.2	302.2	297.4	295.5	292.4
65°	267.0	266.0	261.0	258.0	256.0
67.5°	230.0	226.9	224.6	220.8	218.8
70°	206.0	202.1	199.0	196.0	194.0
72.5°	179.6	176.5	173.4	171.9	169.2
75°	139.0	137.0	135.0	133.0	133.0
77.5°	101.0	100.4	98.4	98.4	97.4
80°	77.0	78.0	76.0	76.0	75.0
82.5°	55.4	56.4	56.0	56.8	55.8
85°	28.0	30.0	31.0	32.0	31.0
87.5°	8.0	10.3	12.0	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	28.3	65.7	19.1	14.4
95°	17.4	69.0	310.0	107.3	66.1
97.5°	31.9	80.8	477.4	341.6	234.1
100°	42.1	87.8	513.7	520.4	400.8
102.5°	53.3	95.4	505.7	666.1	561.7
105°	70.8	107.4	464.3	820.1	779.6
107.5°	88.6	121.4	415.9	863.5	899.6
110°	100.9	131.6	388.1	846.9	927.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.6	141.8	369.4	807.6	923.1
115°	131.6	159.0	352.1	745.8	875.8
117.5°	148.3	174.0	341.8	678.3	815.9
120°	161.7	183.2	340.7	639.6	771.6
122.5°	172.4	193.9	338.0	605.8	728.3
125°	185.7	206.0	336.0	557.6	666.7
127.5°	200.3	219.2	335.0	528.9	618.7
130°	207.8	226.7	333.4	508.8	587.2
132.5°	215.8	234.2	333.4	493.2	565.3
135°	227.1	246.1	332.0	471.0	532.4
137.5°	237.8	256.2	331.9	452.3	505.3
140°	245.8	264.8	331.3	436.7	487.7
142.5°	254.9	270.7	333.0	424.3	470.0
145°	267.9	281.6	334.7	407.7	444.2
147.5°	279.0	292.3	337.6	390.9	422.5
150°	288.6	297.7	338.7	385.3	407.5
152.5°	296.1	305.7	339.8	377.8	398.4
155°	306.0	313.1	342.7	368.4	383.5
157.5°	318.3	322.6	343.4	364.2	374.9
160°	324.7	327.9	346.0	361.0	370.1
162.5°	328.4	332.2	346.6	358.2	365.3
165°	338.0	339.3	346.7	354.2	359.4
167.5°	344.6	343.4	349.8	353.2	355.3
170°	346.7	346.1	348.7	349.4	352.1
172.5°	351.5	349.3	350.3	348.4	350.5
175°	354.1	352.1	350.7	348.7	346.0
177.5°	355.1	352.0	350.3	348.2	348.7
180°	351.4	351.4	351.4	351.4	351.4

(END OF REPORT)