

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: P853657

Luminaire Tested: SQ2-F-025U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853657
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-13)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-F-025U-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

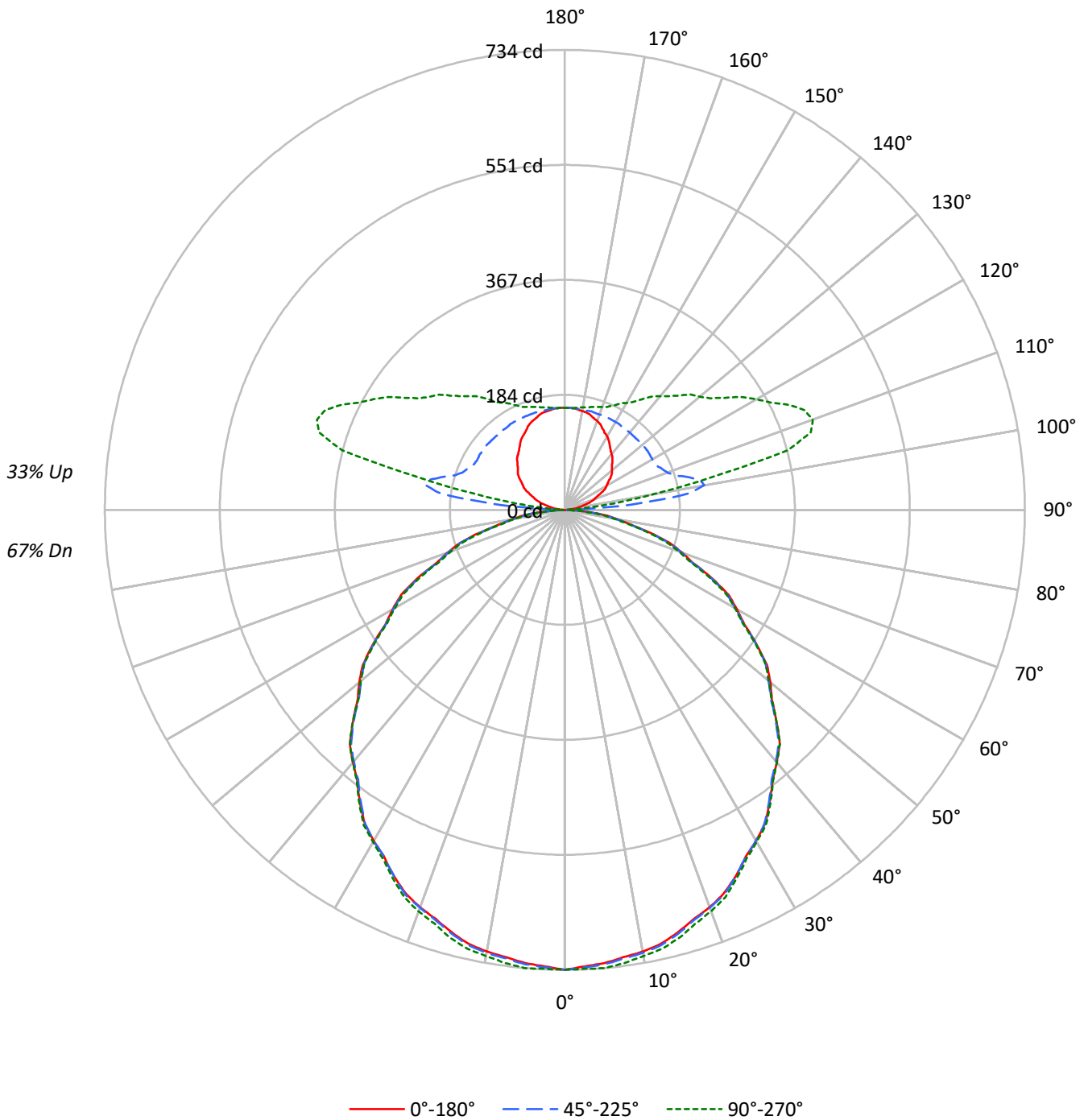
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3072.1 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 25.2
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	62	60	56				
2	92	84	78	73	87	80	74	69	71	66	63	63	59	56	55	53	50	47				
3	84	74	66	60	79	70	63	58	62	57	52	55	51	47	49	46	43	39				
4	77	65	57	51	72	62	55	49	55	49	45	49	44	41	44	40	37	33				
5	70	58	50	44	66	55	48	42	50	43	38	44	39	35	39	35	32	29				
6	65	52	44	38	61	50	42	36	45	38	33	40	35	31	35	31	28	25				
7	60	47	39	33	56	45	37	32	40	34	30	36	31	27	32	28	25	22				
8	56	43	35	29	52	41	33	28	37	31	26	33	28	24	30	25	22	20				
9	52	39	32	26	49	37	30	25	34	28	24	31	25	22	27	23	20	18				
10	49	36	29	24	46	34	27	23	31	25	21	28	23	20	25	21	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11851	11851	11851
5°	11767	11799	11896
10°	11739	11772	11854
15°	11667	11701	11818
20°	11598	11615	11718
25°	11491	11491	11562
30°	11373	11373	11410
35°	11235	11196	11274
40°	11086	11044	11086
45°	10914	10869	10914
50°	10751	10650	10675
55°	10500	10472	10415
60°	10236	10172	10107
65°	9933	9819	9704
70°	9347	9300	9111
75°	8796	8609	8359
80°	7810	7624	7345
85°	6299	5743	5372

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 10981 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	2.3
10°-20°	198.2	6.5
20°-30°	298.3	9.7
30°-40°	356.9	11.6
40°-50°	368.2	12.0
50°-60°	332.2	10.8
60°-70°	253.5	8.3
70°-80°	145.7	4.7
80°-90°	38.4	1.3
90°-100°	65.9	2.1
100°-110°	205.1	6.7
110°-120°	200.7	6.5
120°-130°	163.8	5.3
130°-140°	134.0	4.4
140°-150°	104.6	3.4
150°-160°	75.5	2.5
160°-170°	46.1	1.5
170°-180°	15.6	0.5
0°-30°	565.9	18.4
0°-40°	922.8	30.0
0°-60°	1623.2	52.8
0°-90°	2060.9	67.1
90°-120°	471.7	15.4
90°-150°	874.1	28.5
90°-180°	1011.0	32.9
0°-180°	3072.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	726	736	728	729	734	69
15°	698	707	700	703	707	197
25°	645	652	645	646	649	297
35°	570	574	568	570	572	356
45°	478	481	476	477	478	369
55°	373	375	372	370	370	333
65°	260	259	257	255	254	256
75°	141	140	138	135	134	149
85°	34	32	31	28	29	39
90°	0	1	3	3	3	2
95°	9	27	121	45	29	10
105°	36	51	202	386	368	38
115°	64	76	164	338	396	63
125°	89	99	162	266	312	79
135°	107	119	161	230	258	83
145°	125	135	161	198	216	79
155°	143	148	162	178	184	66
165°	157	158	163	168	170	44
175°	163	163	163	164	163	15
180°	163	163	163	163	163	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	734.0	734.0	734.0	734.0	734.0
2.5°	729.2	737.8	730.8	732.4	733.2
5°	726.0	735.8	728.0	729.1	734.0
7.5°	720.0	730.6	722.0	723.9	729.4
10°	716.0	725.8	718.0	719.1	723.0
12.5°	709.6	719.4	711.6	713.5	717.4
15°	698.0	706.8	700.0	703.1	707.0
17.5°	684.6	694.0	686.4	689.1	692.4
20°	675.0	682.8	676.0	677.1	682.0
22.5°	663.0	670.8	664.8	665.1	669.2
25°	645.0	651.8	645.0	646.1	649.0
27.5°	624.4	630.3	624.4	625.5	628.0
30°	610.0	615.9	610.0	611.0	612.0
32.5°	594.0	599.1	593.2	594.3	596.8
35°	570.0	573.9	568.0	570.0	572.0
37.5°	544.4	547.3	542.4	543.4	545.2
40°	526.0	528.9	524.0	525.0	526.0
42.5°	507.6	509.8	504.8	505.8	507.6
45°	478.0	480.9	476.0	477.0	478.0
47.5°	448.0	449.8	445.6	444.8	446.6
50°	428.0	429.0	424.0	424.0	425.0
52.5°	406.4	407.4	404.0	402.4	403.4
55°	373.0	375.0	372.0	370.0	370.0
57.5°	339.4	341.2	337.4	336.4	336.2
60°	317.0	318.0	315.0	314.0	313.0
62.5°	294.6	294.8	291.8	290.8	289.8
65°	260.0	259.0	257.0	255.0	254.0
67.5°	221.2	222.2	220.2	217.0	217.0
70°	198.0	199.0	197.0	193.0	193.0
72.5°	175.6	175.0	173.8	170.6	169.0
75°	141.0	140.0	138.0	135.0	134.0
77.5°	106.4	105.4	104.4	100.6	101.4
80°	84.0	83.0	82.0	79.0	79.0
82.5°	64.0	62.2	61.2	58.2	58.2
85°	34.0	32.0	31.0	28.0	29.0
87.5°	9.6	9.0	8.6	7.0	7.0
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.2	38.2	12.5	10.2
95°	9.0	26.6	121.0	44.6	29.0
97.5°	16.4	34.6	200.3	124.7	78.6
100°	22.0	38.6	225.9	211.3	141.0
102.5°	27.6	43.4	221.1	301.8	236.9
105°	36.0	50.7	201.9	385.5	367.9
107.5°	44.4	58.1	183.5	391.9	411.3
110°	50.0	63.7	173.9	382.7	420.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.6	68.5	169.1	366.2	414.5
115°	64.0	75.7	163.9	338.2	395.9
117.5°	72.2	82.9	161.7	311.4	370.5
120°	77.0	87.7	160.9	296.2	352.9
122.5°	81.8	92.5	161.7	283.3	335.3
125°	89.0	98.7	161.9	266.0	311.9
127.5°	94.8	104.7	161.9	253.0	292.1
130°	98.0	108.7	161.9	245.7	280.9
132.5°	102.0	112.7	161.1	239.3	272.1
135°	107.0	118.7	160.9	229.6	257.9
137.5°	112.8	123.5	160.9	219.9	245.7
140°	116.0	126.7	160.9	213.5	236.9
142.5°	120.0	129.9	160.9	207.0	228.1
145°	125.0	134.7	160.9	198.3	215.9
147.5°	131.0	139.4	161.9	190.3	204.1
150°	135.0	141.8	161.9	186.2	196.9
152.5°	138.2	144.2	161.9	182.1	191.3
155°	143.0	147.8	161.9	178.1	183.9
157.5°	147.8	151.5	161.9	174.4	178.1
160°	151.0	153.9	161.9	172.0	174.9
162.5°	153.3	155.5	161.9	170.4	172.5
165°	156.9	157.9	162.9	168.0	169.9
167.5°	159.1	159.3	161.9	166.6	167.5
170°	159.9	160.9	161.9	165.0	165.9
172.5°	161.5	161.7	162.7	164.2	164.3
175°	162.9	162.9	162.9	163.9	162.9
177.5°	162.9	162.9	162.9	162.9	162.9
180°	162.9	162.9	162.9	162.9	162.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.99	19.05	18.79	19.87	20.87	17.92	18.97	18.71	19.79	20.79
	3H	19.79	20.74	20.59	21.56	22.60	19.67	20.62	20.47	21.44	22.48
	4H	20.46	21.35	21.28	22.19	23.23	20.30	21.20	21.13	22.04	23.08
	6H	20.94	21.76	21.77	22.61	23.66	20.75	21.58	21.59	22.42	23.48
	8H	21.08	21.87	21.92	22.73	23.79	20.88	21.67	21.72	22.53	23.58
	12H	21.16	21.91	22.01	22.77	23.85	20.94	21.69	21.79	22.54	23.63
4H	2H	18.57	19.47	19.40	20.30	21.34	18.51	19.40	19.33	20.24	21.28
	3H	20.57	21.32	21.41	22.19	23.25	20.46	21.21	21.30	22.08	23.14
	4H	21.37	22.05	22.22	22.92	24.01	21.23	21.91	22.08	22.78	23.86
	6H	21.97	22.56	22.84	23.45	24.54	21.79	22.38	22.66	23.27	24.36
	8H	22.16	22.72	23.04	23.60	24.70	21.96	22.52	22.83	23.40	24.50
	12H	22.28	22.77	23.17	23.68	24.79	22.05	22.55	22.94	23.45	24.56
8H	4H	21.63	22.19	22.51	23.07	24.17	21.51	22.06	22.38	22.95	24.05
	6H	22.36	22.82	23.26	23.74	24.85	22.19	22.65	23.09	23.58	24.68
	8H	22.63	23.04	23.54	23.96	25.08	22.44	22.84	23.35	23.76	24.88
	12H	22.81	23.16	23.72	24.08	25.25	22.58	22.94	23.49	23.85	25.02
12H	4H	21.64	22.14	22.53	23.04	24.15	21.52	22.01	22.41	22.92	24.03
	6H	22.40	22.81	23.31	23.73	24.85	22.25	22.65	23.16	23.57	24.69
	8H	22.71	23.07	23.62	23.98	25.15	22.52	22.88	23.43	23.79	24.96