

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: P521549

Luminaire Tested: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521549
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-100U-050D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6306.5 lumens
Efficiency: N/A
Efficacy: 118.8 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

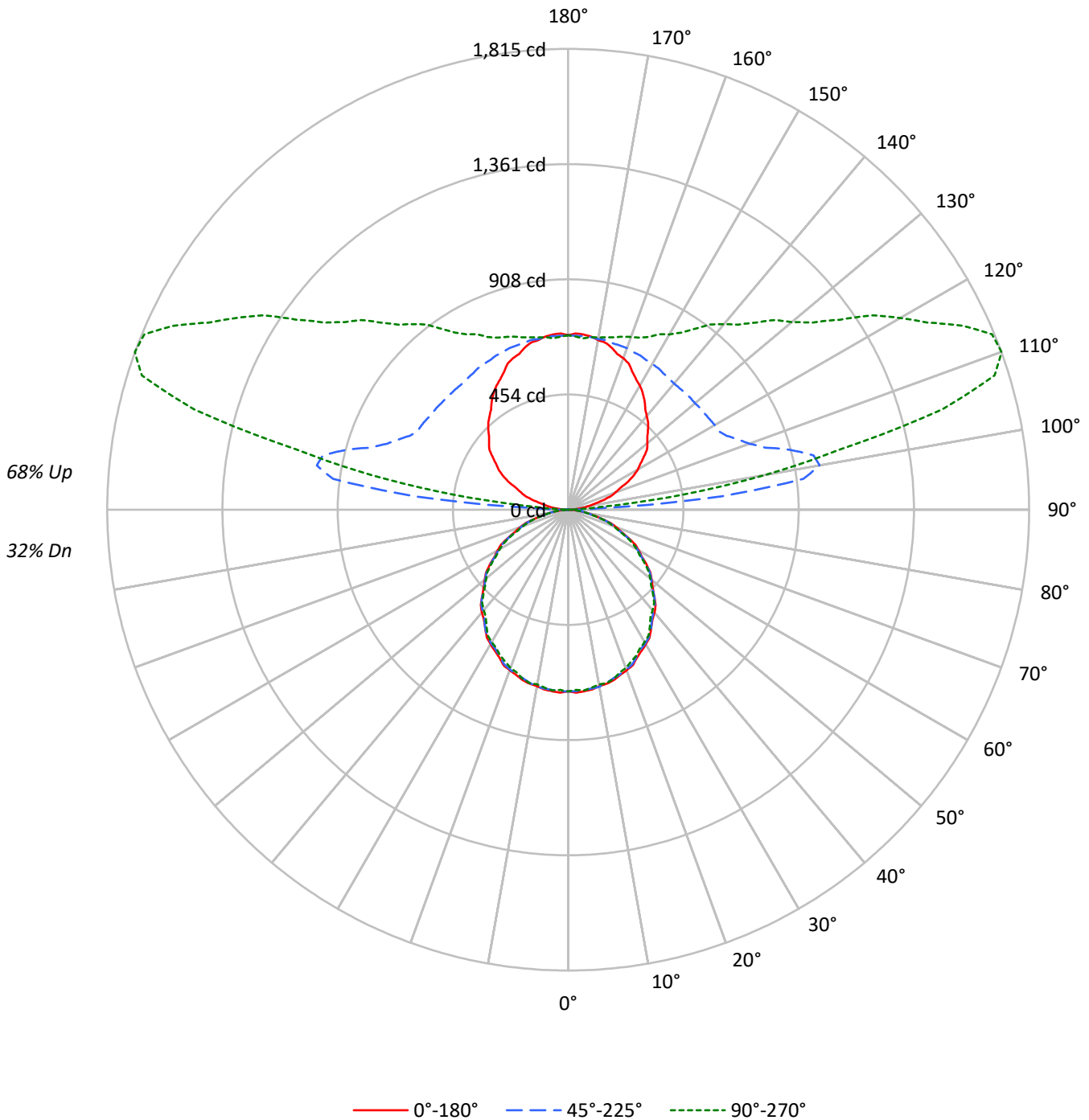
Input Watts (W): 53.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32																				
1	94	89	86	82	84	81	77	75	64	62	60	49	48	46	35	34	33	27																				
2	85	78	72	67	76	70	65	61	56	53	49	43	41	38	31	29	28	22																				
3	78	68	61	56	70	62	56	51	49	45	41	38	35	32	27	25	24	19																				
4	71	60	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16																				
5	65	54	46	40	58	49	42	37	39	34	30	30	26	24	22	19	18	14																				
6	60	48	40	34	53	43	37	32	35	30	26	27	23	21	20	17	15	12																				
7	55	43	35	30	49	39	32	27	32	26	23	24	21	18	18	15	14	11																				
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	10																				
9	47	35	28	23	43	32	26	21	26	21	18	20	17	14	15	13	11	9																				
10	44	32	25	21	40	30	23	19	24	19	16	19	15	13	14	12	10	8																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6604	6604	6604
5°	6648	6602	6612
10°	6615	6633	6550
15°	6632	6567	6594
20°	6607	6577	6511
25°	6531	6492	6452
30°	6512	6471	6409
35°	6412	6412	6313
40°	6363	6304	6222
45°	6243	6243	6155
50°	6168	6126	6041
55°	6064	6000	5907
60°	5929	5820	5729
65°	5691	5565	5458
70°	5427	5241	5112
75°	4837	4698	4631
80°	3995	3942	3889
85°	2890	3208	3208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6243 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	1.1
10°-20°	194.2	3.1
20°-30°	293.4	4.7
30°-40°	353.3	5.6
40°-50°	366.3	5.8
50°-60°	332.1	5.3
60°-70°	252.5	4.0
70°-80°	140.6	2.2
80°-90°	36.2	0.6
90°-100°	313.2	5.0
100°-110°	891.3	14.1
110°-120°	853.9	13.5
120°-130°	675.9	10.7
130°-140°	542.5	8.6
140°-150°	424.7	6.7
150°-160°	310.7	4.9
160°-170°	192.5	3.1
170°-180°	65.3	1.0
0°-30°	555.3	8.8
0°-40°	908.6	14.4
0°-60°	1607.1	25.5
0°-90°	2036.4	32.3
90°-120°	2058.5	32.6
90°-150°	3701.5	58.7
90°-180°	4270.0	67.7
0°-180°	6306.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	718	709	713	714	714	68
15°	694	688	688	688	690	196
25°	642	637	638	634	634	297
35°	569	564	569	562	560	357
45°	478	476	478	470	472	370
55°	377	376	373	369	367	336
65°	261	260	255	252	250	258
75°	136	134	132	130	130	144
85°	27	29	30	31	30	33
90°	0	0	0	0	0	3
95°	34	135	606	210	129	39
105°	138	210	908	1604	1525	147
115°	258	311	689	1459	1713	253
125°	363	403	657	1091	1304	325
135°	444	481	650	922	1042	343
145°	524	551	655	798	869	327
155°	599	613	670	721	750	277
165°	661	664	678	693	703	186
175°	693	689	686	682	677	66
180°	687	687	687	687	687	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	715.8	715.8	715.8	715.8	715.8
2.5°	721.3	713.7	715.0	715.7	710.4
5°	717.8	709.2	712.9	713.9	713.9
7.5°	714.6	708.0	710.4	707.4	707.0
10°	706.1	703.2	708.0	701.1	699.2
12.5°	702.1	697.8	698.6	697.3	699.2
15°	694.3	687.7	687.5	687.6	690.4
17.5°	682.2	673.6	679.3	673.2	672.5
20°	672.9	664.3	669.9	663.1	663.1
22.5°	663.5	653.4	659.0	649.8	647.5
25°	641.6	636.8	637.7	633.8	633.8
27.5°	626.2	615.7	619.1	613.7	614.1
30°	611.3	600.8	607.4	599.7	601.6
32.5°	596.5	589.8	593.4	584.8	588.3
35°	569.3	563.6	569.3	562.5	560.5
37.5°	545.5	539.6	541.4	537.0	532.2
40°	528.3	521.6	523.4	517.6	516.6
42.5°	509.6	505.2	505.5	500.4	501.0
45°	478.5	475.7	478.5	469.8	471.7
47.5°	450.8	447.3	447.1	441.3	443.6
50°	429.7	427.8	426.8	420.9	420.9
52.5°	407.8	405.9	404.9	400.6	399.8
55°	377.0	376.0	373.0	369.1	367.2
57.5°	343.2	341.3	339.6	335.5	334.0
60°	321.3	319.4	315.4	310.5	310.5
62.5°	297.1	295.2	290.4	288.6	285.5
65°	260.7	259.8	254.9	251.9	250.0
67.5°	224.6	221.6	219.3	215.6	213.7
70°	201.2	197.4	194.3	191.4	189.5
72.5°	175.4	172.3	169.3	167.9	165.2
75°	135.7	133.8	131.8	129.9	129.9
77.5°	98.6	98.1	96.1	96.1	95.1
80°	75.2	76.2	74.2	74.2	73.2
82.5°	54.1	55.1	54.7	55.4	54.5
85°	27.3	29.3	30.3	31.2	30.3
87.5°	7.8	10.1	11.7	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	55.4	128.6	37.4	28.2
95°	34.0	134.9	606.4	209.9	129.4
97.5°	62.5	158.1	933.9	668.3	457.9
100°	82.3	171.8	1005.0	1018.0	784.1
102.5°	104.3	186.6	989.3	1303.0	1098.8
105°	138.5	210.1	908.3	1604.4	1525.1
107.5°	173.3	237.4	813.7	1689.3	1759.9
110°	197.3	257.4	759.3	1656.8	1815.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.3	277.3	722.7	1579.9	1805.9
115°	257.5	311.1	688.7	1459.0	1713.3
117.5°	290.1	340.5	668.6	1326.9	1596.2
120°	316.3	358.4	666.5	1251.3	1509.5
122.5°	337.2	379.3	661.3	1185.0	1424.8
125°	363.3	402.9	657.4	1090.9	1304.3
127.5°	391.8	428.9	655.3	1034.6	1210.4
130°	406.4	443.5	652.1	995.4	1148.8
132.5°	422.1	458.2	652.1	964.8	1105.9
135°	444.3	481.4	649.5	921.5	1041.6
137.5°	465.3	501.3	649.3	884.8	988.5
140°	480.9	518.0	648.2	854.4	954.0
142.5°	498.7	529.6	651.4	830.1	919.5
145°	524.1	550.9	654.8	797.5	869.1
147.5°	545.8	571.8	660.5	764.6	826.5
150°	564.6	582.5	662.6	753.8	797.2
152.5°	579.2	598.1	664.7	739.0	779.4
155°	598.6	612.6	670.4	720.8	750.2
157.5°	622.6	631.0	671.7	712.5	733.4
160°	635.1	641.5	677.0	706.1	724.0
162.5°	642.5	649.9	678.0	700.8	714.6
165°	661.3	663.8	678.3	692.9	703.1
167.5°	674.1	671.8	684.3	690.9	695.0
170°	678.3	677.0	682.2	683.6	688.7
172.5°	687.7	683.3	685.3	681.5	685.6
175°	692.7	688.8	686.1	682.1	677.0
177.5°	694.7	688.6	685.3	681.2	682.2
180°	687.4	687.4	687.4	687.4	687.4

(END OF REPORT)