

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: P521562

Luminaire Tested: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521562
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 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: 7319.8 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

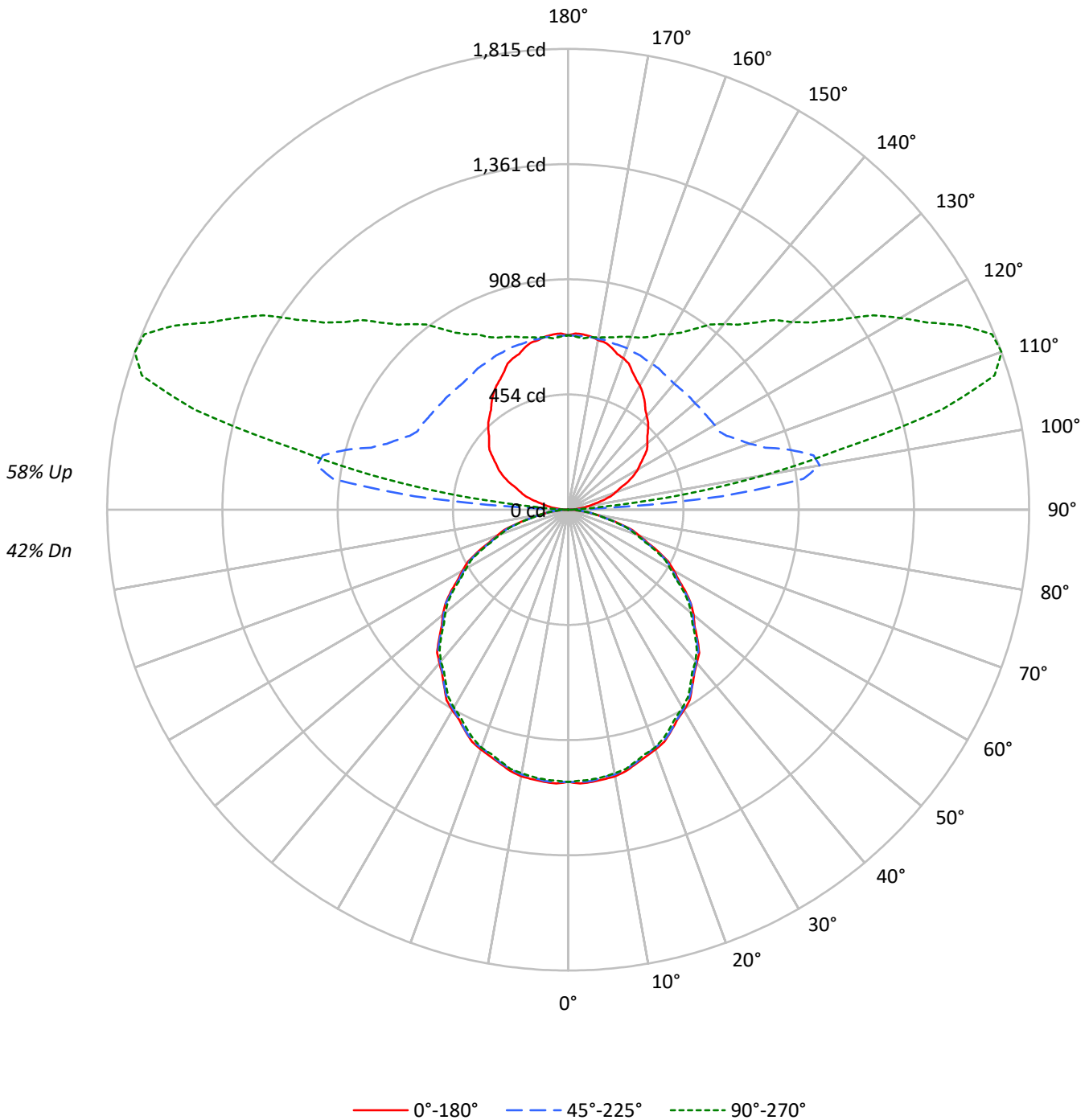
Input Watts (W): 64.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48
1	96	91	88	84	87	84	80	77	69	66	64	55	54	52	43	42	41
2	87	80	74	68	79	73	68	63	60	56	53	48	46	43	37	36	34
3	79	70	63	57	72	64	58	53	53	48	44	43	39	36	33	31	29
4	72	62	54	48	66	57	50	44	47	42	38	38	34	31	29	27	25
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	24	21
6	61	49	41	35	55	45	38	33	38	32	28	30	26	23	24	21	19
7	56	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9893	9893	9893
5°	9967	9931	9876
10°	9991	9918	9872
15°	9888	9851	9804
20°	9866	9800	9790
25°	9782	9763	9653
30°	9717	9655	9582
35°	9580	9569	9449
40°	9492	9445	9386
45°	9379	9327	9225
50°	9251	9182	9056
55°	9080	8969	8844
60°	8866	8722	8560
65°	8571	8379	8230
70°	8036	7850	7666
75°	7240	7033	6926
80°	5914	5967	5866
85°	4234	4859	4859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9379 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	1.4
10°-20°	290.6	4.0
20°-30°	439.7	6.0
30°-40°	528.8	7.2
40°-50°	549.0	7.5
50°-60°	497.4	6.8
60°-70°	378.4	5.2
70°-80°	210.3	2.9
80°-90°	54.2	0.7
90°-100°	313.2	4.3
100°-110°	891.3	12.2
110°-120°	853.9	11.7
120°-130°	675.9	9.2
130°-140°	542.5	7.4
140°-150°	424.7	5.8
150°-160°	310.7	4.2
160°-170°	192.5	2.6
170°-180°	65.3	0.9
0°-30°	831.8	11.4
0°-40°	1360.6	18.6
0°-60°	2407.0	32.9
0°-90°	3049.8	41.7
90°-120°	2058.5	28.1
90°-150°	3701.5	50.6
90°-180°	4270.0	58.3
0°-180°	7319.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1076	1067	1072	1067	1066	102
15°	1035	1027	1031	1030	1026	293
25°	961	952	959	949	948	443
35°	851	847	850	840	839	533
45°	719	714	715	707	707	555
55°	564	564	558	553	550	504
65°	393	387	384	378	377	386
75°	203	200	197	195	194	215
85°	40	43	46	46	46	49
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°	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1079.3	1070.1	1073.1	1070.7	1068.4
5°	1076.2	1066.6	1072.3	1067.4	1066.4
7.5°	1071.1	1059.8	1062.5	1061.5	1061.5
10°	1066.4	1052.1	1058.6	1053.7	1053.7
12.5°	1053.9	1041.9	1046.9	1044.4	1045.9
15°	1035.2	1026.6	1031.3	1030.2	1026.4
17.5°	1019.0	1008.6	1012.1	1010.3	1008.8
20°	1004.9	995.3	998.1	993.3	997.1
22.5°	989.3	979.7	984.8	976.8	976.8
25°	960.9	952.3	959.0	949.2	948.2
27.5°	930.9	925.3	929.7	922.4	919.7
30°	912.1	903.5	906.3	901.3	899.4
32.5°	890.2	881.6	884.4	875.6	876.8
35°	850.6	846.8	849.6	839.8	838.9
37.5°	814.7	807.0	811.5	803.5	802.7
40°	788.1	780.5	784.2	779.3	779.3
42.5°	763.9	755.5	757.6	751.1	748.8
45°	718.8	714.0	714.8	707.0	707.0
47.5°	674.2	670.8	669.3	661.4	662.9
50°	644.5	638.8	639.7	630.9	630.9
52.5°	610.2	610.5	606.8	601.1	596.5
55°	564.5	563.5	557.6	552.7	549.8
57.5°	515.6	511.2	507.0	500.4	499.8
60°	480.5	477.6	472.7	466.7	463.9
62.5°	444.5	441.7	436.7	431.6	431.1
65°	392.6	386.9	383.8	377.9	377.0
67.5°	336.1	331.6	327.7	323.0	322.5
70°	297.9	294.0	291.0	287.0	284.2
72.5°	262.7	256.6	253.5	250.3	248.2
75°	203.1	200.3	197.3	195.3	194.3
77.5°	145.7	145.9	145.9	143.3	142.4
80°	111.3	112.3	112.3	111.3	110.4
82.5°	80.9	82.6	83.4	82.4	82.2
85°	40.0	42.9	45.9	45.9	45.9
87.5°	10.9	14.8	18.0	18.7	18.0
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)