

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: P521577

Luminaire Tested: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521577
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8632.9 lumens
Efficiency: N/A
Efficacy: 115.4 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

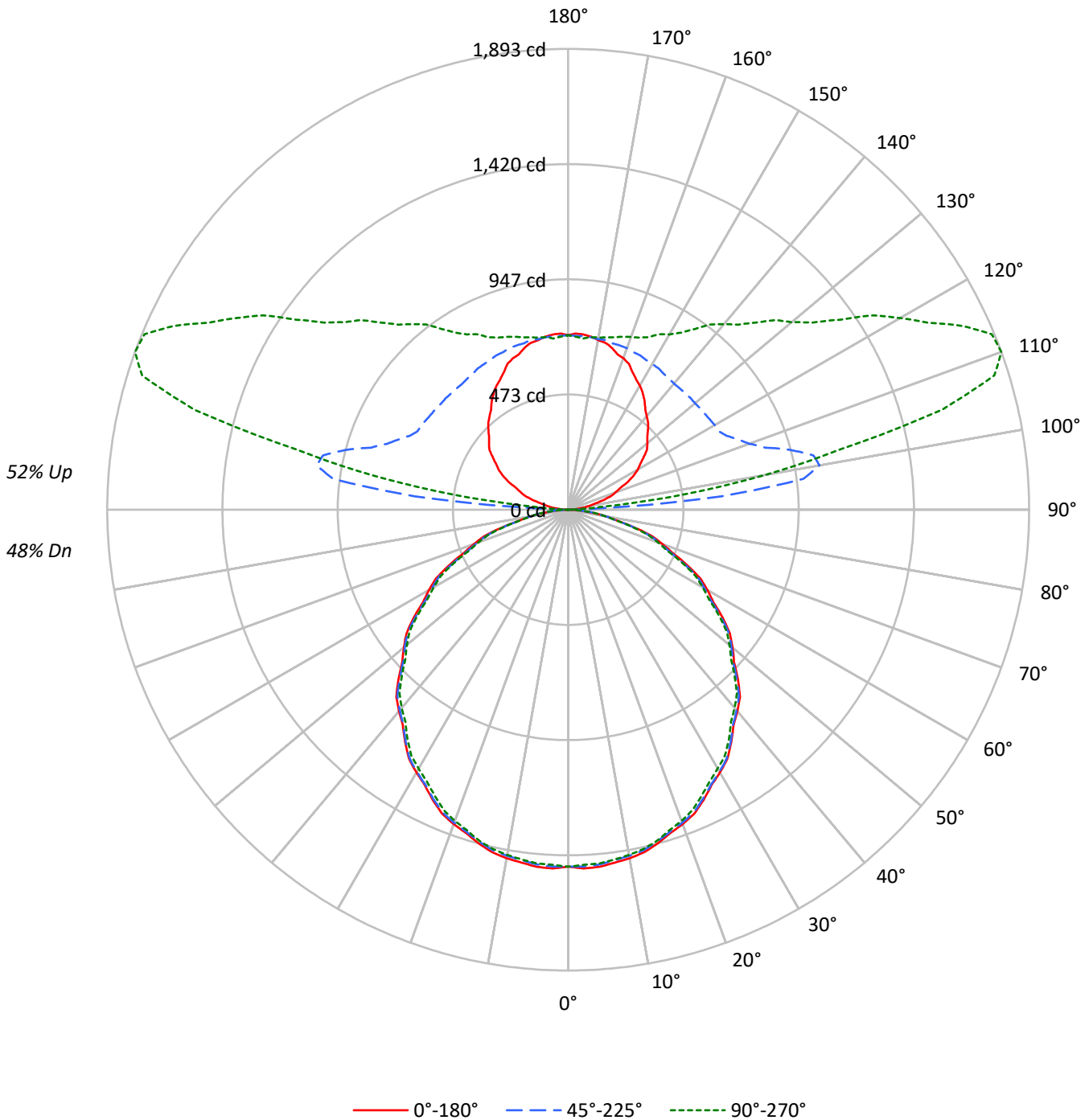
Input Watts (W): 74.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	82	82	82	68	68	68	55	55	55	48						48														
1	97	93	89	85	89	86	82	79	72	70	67	60	58	56	48	47	46	41						41														
2	88	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38	34						34														
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	32	28						28														
4	74	63	55	49	67	58	51	46	49	44	39	41	37	34	33	30	28	24						24														
5	67	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21						21														
6	62	50	42	36	57	46	39	34	39	34	29	33	29	25	27	24	21	18						18														
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16						16														
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14						14														
9	49	37	30	25	45	35	28	23	30	24	20	25	21	18	21	17	15	13						13														
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12						12														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13528	13528	13528
5°	13637	13552	13514
10°	13623	13527	13490
15°	13559	13481	13452
20°	13497	13437	13357
25°	13393	13341	13196
30°	13279	13245	13084
35°	13144	13098	12960
40°	13012	12963	12804
45°	12861	12756	12609
50°	12642	12555	12409
55°	12465	12284	12138
60°	12177	11931	11763
65°	11782	11448	11271
70°	11098	10742	10547
75°	10017	9764	9618
80°	8278	8278	8172
85°	5822	6680	6902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12861 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	1.6
10°-20°	397.7	4.6
20°-30°	601.4	7.0
30°-40°	724.2	8.4
40°-50°	752.1	8.7
50°-60°	681.7	7.9
60°-70°	519.2	6.0
70°-80°	290.1	3.4
80°-90°	75.3	0.9
90°-100°	326.6	3.8
100°-110°	929.4	10.8
110°-120°	890.4	10.3
120°-130°	704.7	8.2
130°-140°	565.7	6.6
140°-150°	442.8	5.1
150°-160°	324.0	3.8
160°-170°	200.7	2.3
170°-180°	68.1	0.8
0°-30°	1137.9	13.2
0°-40°	1862.0	21.6
0°-60°	3295.8	38.2
0°-90°	4180.4	48.4
90°-120°	2146.4	24.9
90°-150°	3859.7	44.7
90°-180°	4453.0	51.6
0°-180°	8632.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1466	1466	1466	1466	1466	
5°	1472	1458	1463	1459	1459	140
15°	1420	1407	1411	1408	1408	400
25°	1316	1305	1310	1300	1296	606
35°	1167	1160	1163	1152	1151	730
45°	986	980	978	967	966	759
55°	775	772	764	755	755	691
65°	540	534	524	517	516	532
75°	281	277	274	270	270	297
85°	55	59	63	64	65	69
90°	0	0	0	0	0	4
95°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

TEST NUMBER: P521577

CATALOG NUMBER: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_400K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1466.3	1466.3	1466.3	1466.3	1466.3
2.5°	1475.3	1463.4	1467.2	1464.6	1459.8
5°	1472.5	1458.5	1463.3	1459.2	1459.2
7.5°	1462.3	1448.9	1452.1	1449.6	1449.6
10°	1454.1	1439.2	1443.9	1439.9	1439.9
12.5°	1441.1	1427.7	1432.5	1428.4	1427.6
15°	1419.5	1406.6	1411.4	1408.3	1408.3
17.5°	1393.4	1381.1	1387.3	1382.4	1380.8
20°	1374.7	1360.8	1368.6	1360.4	1360.4
22.5°	1351.9	1339.5	1346.6	1336.8	1335.2
25°	1315.6	1304.7	1310.5	1300.3	1296.3
27.5°	1274.9	1263.2	1271.8	1260.4	1258.2
30°	1246.4	1235.4	1243.3	1231.0	1228.1
32.5°	1215.4	1206.1	1211.6	1200.1	1197.9
35°	1167.0	1160.0	1162.9	1151.7	1150.7
37.5°	1115.4	1108.7	1111.4	1098.9	1098.1
40°	1080.4	1074.4	1076.3	1063.1	1063.1
42.5°	1044.6	1037.8	1038.0	1025.6	1024.8
45°	985.7	979.7	977.6	967.4	966.4
47.5°	923.2	920.4	917.1	906.9	906.9
50°	880.8	878.8	874.7	864.5	864.5
52.5°	837.6	836.5	830.7	822.1	820.5
55°	774.9	771.9	763.7	754.6	754.6
57.5°	706.3	703.9	694.7	687.3	685.5
60°	659.9	655.9	646.6	638.4	637.5
62.5°	611.8	608.6	598.6	591.2	589.4
65°	539.7	533.7	524.4	517.3	516.3
67.5°	463.5	456.8	448.7	442.7	440.7
70°	411.4	405.4	398.2	393.0	391.0
72.5°	360.1	354.1	347.6	344.2	343.8
75°	281.0	277.1	273.9	269.8	269.8
77.5°	203.9	201.5	199.8	197.8	197.8
80°	155.8	155.8	155.8	153.8	153.8
82.5°	111.8	114.2	115.9	114.7	114.7
85°	55.0	59.0	63.1	64.2	65.2
87.5°	15.5	20.3	25.3	26.1	26.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)