

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: P521629

Luminaire Tested: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521629
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-125U-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

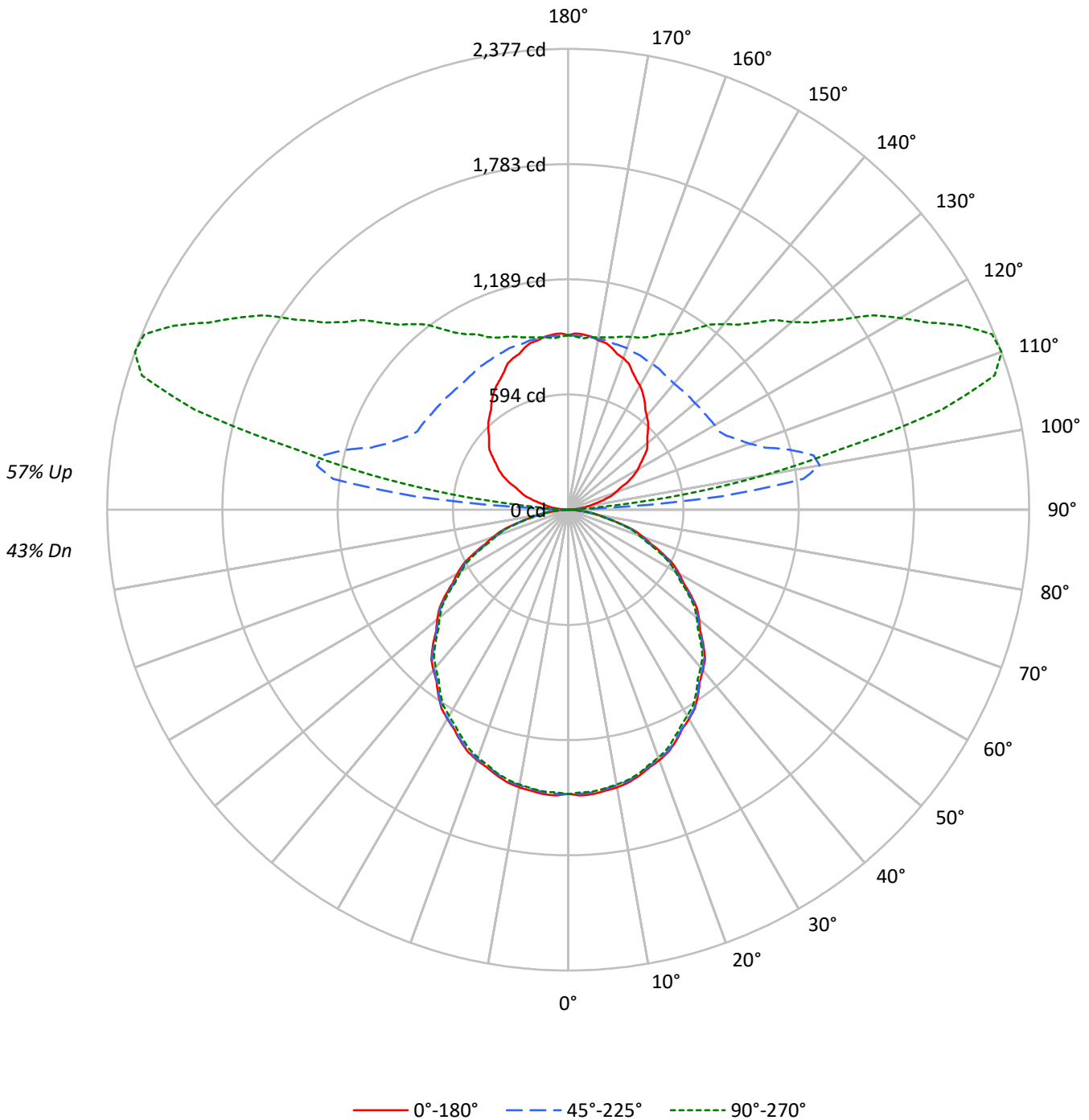
Lumens per Lamp: N/A
Luminaire Lumens: 9772.7 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.9
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43																				
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	44	43	42	36																				
2	87	80	74	69	79	73	68	63	61	57	53	49	46	44	38	36	35	30																				
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	29	25																				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	31	30	27	25	21																				
5	67	55	47	41	61	51	43	38	42	37	33	34	30	27	27	24	22	18																				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13																				
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	19	16	14	11																				
10	45	33	26	22	42	31	25	20	26	21	18	22	18	15	17	14	12	10																				

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	1.4
10°-20°	397.7	4.1
20°-30°	601.4	6.2
30°-40°	724.2	7.4
40°-50°	752.1	7.7
50°-60°	681.7	7.0
60°-70°	519.2	5.3
70°-80°	290.1	3.0
80°-90°	75.3	0.8
90°-100°	410.2	4.2
100°-110°	1167.3	11.9
110°-120°	1118.4	11.4
120°-130°	885.2	9.1
130°-140°	710.5	7.3
140°-150°	556.2	5.7
150°-160°	407.0	4.2
160°-170°	252.1	2.6
170°-180°	85.5	0.9
0°-30°	1137.9	11.6
0°-40°	1862.0	19.1
0°-60°	3295.8	33.7
0°-90°	4180.4	42.8
90°-120°	2695.9	27.6
90°-150°	4847.7	49.6
90°-180°	5592.0	57.2
0°-180°	9772.7	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°	44	177	794	275	169	51
105°	181	275	1190	2101	1997	192
115°	337	408	902	1911	2244	332
125°	476	528	861	1429	1708	426
135°	582	630	851	1207	1364	449
145°	686	722	858	1044	1138	429
155°	784	802	878	944	982	362
165°	866	869	888	907	921	244
175°	907	902	899	893	887	86
180°	900	900	900	900	900	

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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°	13.7	72.6	168.4	49.0	37.0
95°	44.5	176.7	794.2	274.9	169.4
97.5°	81.8	207.0	1223.1	875.2	599.7
100°	107.8	225.0	1316.2	1333.2	1026.9
102.5°	136.6	244.4	1295.7	1706.5	1439.1
105°	181.4	275.1	1189.5	2101.2	1997.4
107.5°	227.0	311.0	1065.6	2212.4	2304.8
110°	258.4	337.1	994.4	2169.9	2377.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.6	363.2	946.5	2069.2	2365.0
115°	337.2	407.5	902.0	1910.8	2243.9
117.5°	380.0	445.9	875.6	1737.7	2090.5
120°	414.2	469.4	872.9	1638.8	1976.9
122.5°	441.6	496.8	866.1	1552.0	1866.0
125°	475.8	527.7	860.9	1428.7	1708.1
127.5°	513.1	561.7	858.2	1355.0	1585.3
130°	532.3	580.8	854.1	1303.6	1504.5
132.5°	552.8	600.0	854.1	1263.6	1448.3
135°	581.9	630.5	850.7	1206.8	1364.1
137.5°	609.3	656.5	850.3	1158.7	1294.6
140°	629.9	678.4	848.9	1118.9	1249.4
142.5°	653.1	693.6	853.0	1087.1	1204.3
145°	686.3	721.5	857.5	1044.5	1138.2
147.5°	714.8	748.9	865.0	1001.4	1082.4
150°	739.4	762.8	867.8	987.2	1044.1
152.5°	758.6	783.3	870.5	967.9	1020.8
155°	783.9	802.3	878.0	943.9	982.4
157.5°	815.4	826.4	879.7	933.1	960.5
160°	831.8	840.2	886.6	924.8	948.2
162.5°	841.4	851.1	888.0	917.8	935.9
165°	866.1	869.4	888.3	907.4	920.8
167.5°	882.8	879.8	896.2	904.9	910.2
170°	888.3	886.6	893.4	895.3	902.0
172.5°	900.6	894.9	897.5	892.5	897.9
175°	907.1	902.1	898.6	893.3	886.6
177.5°	909.9	901.8	897.5	892.1	893.4
180°	900.3	900.3	900.3	900.3	900.3

(END OF REPORT)