

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: P521566

Luminaire Tested: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521566
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7841.5 lumens
Efficiency: N/A
Efficacy: 122.3 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

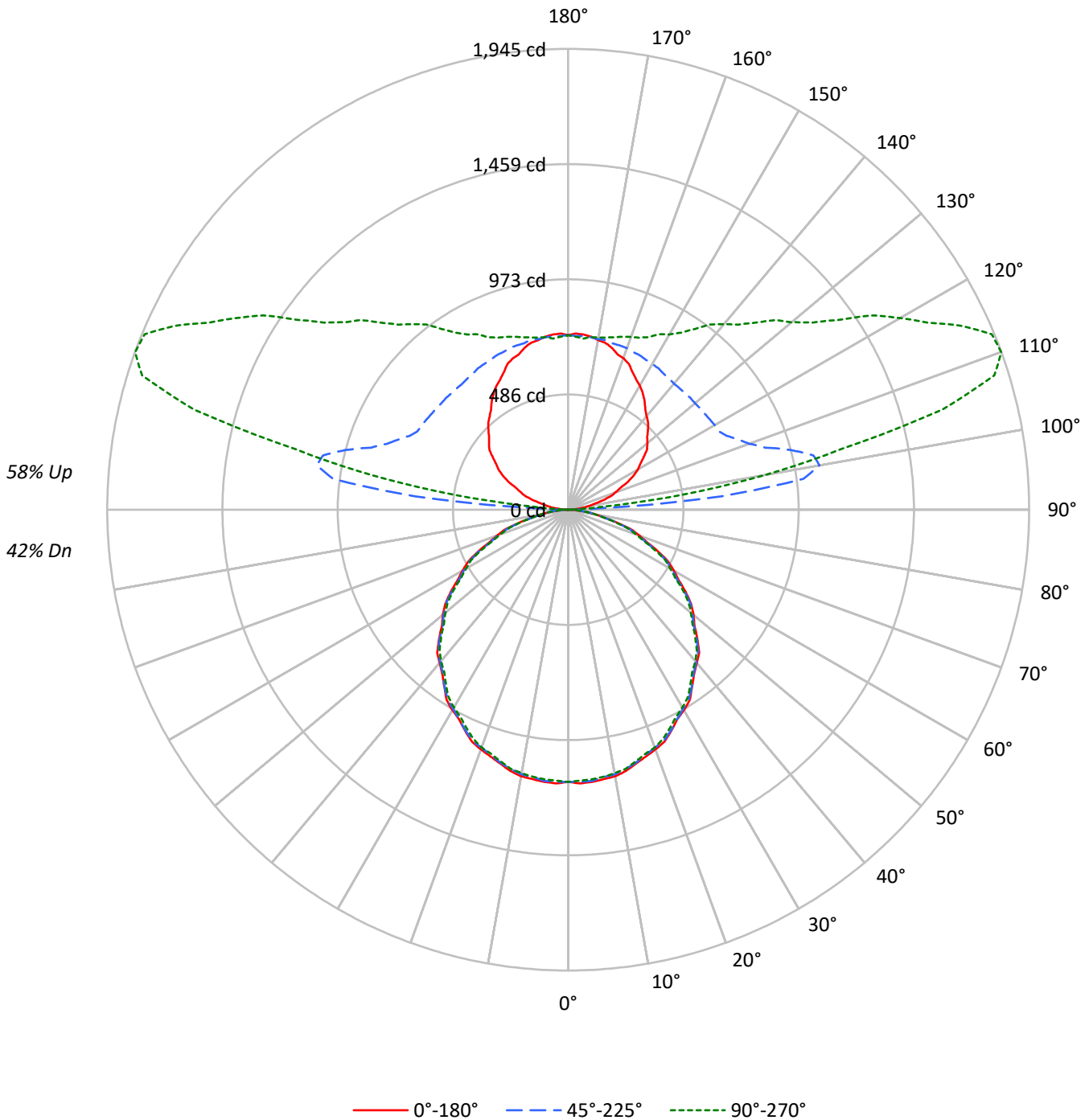
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42				
1	96	91	88	84	87	84	80	77	69	66	64	55	54	52	43	42	41	35				
2	87	80	74	68	79	73	68	63	60	56	53	48	46	43	37	36	34	29				
3	79	70	63	57	72	64	58	53	53	48	44	43	39	36	33	31	29	24				
4	72	62	54	48	66	57	50	44	47	42	38	38	34	31	29	27	25	21				
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	24	21	18				
6	61	49	41	35	55	45	38	33	38	32	28	30	26	23	24	21	19	16				
7	56	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	25	21	18	20	17	15	12				
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10598	10598	10598
5°	10678	10639	10580
10°	10703	10624	10575
15°	10592	10553	10502
20°	10569	10498	10487
25°	10479	10458	10341
30°	10410	10342	10265
35°	10263	10252	10122
40°	10169	10118	10054
45°	10047	9992	9882
50°	9911	9835	9700
55°	9727	9609	9474
60°	9497	9342	9169
65°	9182	8975	8815
70°	8608	8411	8211
75°	7757	7532	7422
80°	6339	6392	6280
85°	4541	5208	5208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10047 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	1.4
10°-20°	311.3	4.0
20°-30°	471.0	6.0
30°-40°	566.5	7.2
40°-50°	588.1	7.5
50°-60°	532.8	6.8
60°-70°	405.3	5.2
70°-80°	225.3	2.9
80°-90°	58.0	0.7
90°-100°	335.6	4.3
100°-110°	954.8	12.2
110°-120°	914.8	11.7
120°-130°	724.0	9.2
130°-140°	581.1	7.4
140°-150°	455.0	5.8
150°-160°	332.9	4.2
160°-170°	206.2	2.6
170°-180°	70.0	0.9
0°-30°	891.1	11.4
0°-40°	1457.6	18.6
0°-60°	2578.5	32.9
0°-90°	3267.2	41.7
90°-120°	2205.2	28.1
90°-150°	3965.3	50.6
90°-180°	4574.0	58.3
0°-180°	7841.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1153	1143	1149	1143	1142	110
15°	1109	1100	1105	1104	1100	314
25°	1029	1020	1027	1017	1016	474
35°	911	907	910	900	899	571
45°	770	765	766	757	757	594
55°	605	604	597	592	589	540
65°	421	414	411	405	404	414
75°	218	214	211	209	208	230
85°	43	46	49	49	49	53
90°	0	0	0	0	0	3
95°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.7	1148.7	1148.7	1148.7	1148.7
2.5°	1156.2	1146.4	1149.5	1147.0	1144.5
5°	1152.9	1142.7	1148.7	1143.4	1142.4
7.5°	1147.4	1135.4	1138.2	1137.2	1137.2
10°	1142.4	1127.1	1134.0	1128.8	1128.8
12.5°	1129.0	1116.1	1121.5	1118.8	1120.4
15°	1108.9	1099.7	1104.8	1103.6	1099.5
17.5°	1091.6	1080.5	1084.3	1082.3	1080.7
20°	1076.5	1066.3	1069.2	1064.0	1068.1
22.5°	1059.8	1049.5	1055.0	1046.4	1046.4
25°	1029.4	1020.2	1027.3	1016.9	1015.8
27.5°	997.2	991.3	996.0	988.1	985.3
30°	977.1	967.9	970.8	965.6	963.5
32.5°	953.7	944.5	947.4	938.0	939.3
35°	911.2	907.1	910.2	899.7	898.7
37.5°	872.7	864.5	869.4	860.8	860.0
40°	844.3	836.1	840.1	834.8	834.8
42.5°	818.3	809.3	811.6	804.7	802.2
45°	770.0	764.9	765.8	757.4	757.4
47.5°	722.3	718.6	717.0	708.5	710.1
50°	690.5	684.3	685.2	675.8	675.8
52.5°	653.6	654.1	650.1	643.9	639.0
55°	604.7	603.7	597.4	592.1	589.0
57.5°	552.4	547.7	543.2	536.0	535.4
60°	514.7	511.6	506.3	500.0	496.9
62.5°	476.2	473.1	467.8	462.4	461.8
65°	420.6	414.4	411.1	404.8	403.8
67.5°	360.1	355.2	351.1	346.1	345.4
70°	319.1	315.0	311.8	307.5	304.4
72.5°	281.4	274.9	271.6	268.2	265.9
75°	217.6	214.5	211.3	209.2	208.2
77.5°	156.1	156.3	156.3	153.6	152.5
80°	119.3	120.3	120.3	119.2	118.2
82.5°	86.6	88.5	89.3	88.3	88.1
85°	42.9	46.0	49.2	49.2	49.2
87.5°	11.7	15.8	19.2	20.1	19.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)