

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: P521671

Luminaire Tested: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521671
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-150U-075D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10336.4 lumens
Efficiency: N/A
Efficacy: 124.8 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: Semi-Indirect

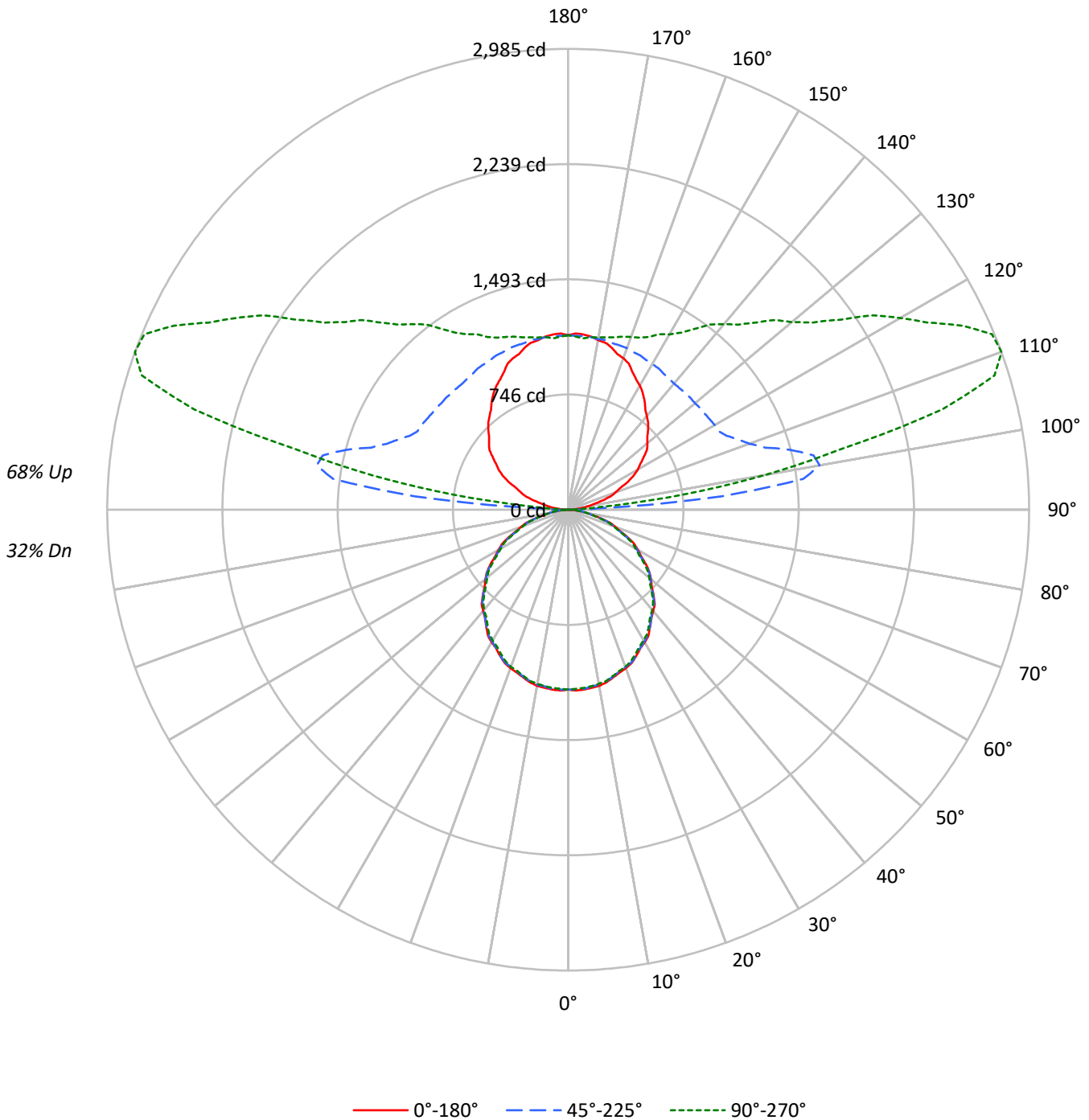
Input Watts (W): 82.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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	47	46		35	34	33	27
2	85	78	72	67	76	70	65	61	56	52	49		43	40	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	63	55	48	43	44	39	35		33	30	27		24	22	20	16
5	65	54	46	40	58	48	42	36	39	34	30		30	26	24		22	19	17	14
6	60	48	40	34	53	43	37	31	35	30	26		27	23	21		19	17	15	12
7	55	43	35	30	49	39	32	27	31	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	29	23	19	24	19	16		19	15	13		14	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10749	10749	10749
5°	10829	10791	10731
10°	10855	10776	10726
15°	10743	10703	10652
20°	10720	10647	10637
25°	10629	10608	10488
30°	10558	10491	10411
35°	10409	10397	10266
40°	10313	10261	10198
45°	10189	10134	10023
50°	10052	9976	9839
55°	9865	9746	9609
60°	9632	9477	9300
65°	9313	9104	8942
70°	8729	8530	8330
75°	7867	7639	7529
80°	6429	6482	6370
85°	4605	5282	5282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	1.1
10°-20°	315.7	3.1
20°-30°	477.7	4.6
30°-40°	574.5	5.6
40°-50°	596.5	5.8
50°-60°	540.4	5.2
60°-70°	411.1	4.0
70°-80°	228.5	2.2
80°-90°	58.9	0.6
90°-100°	515.2	5.0
100°-110°	1465.8	14.2
110°-120°	1404.4	13.6
120°-130°	1111.5	10.8
130°-140°	892.2	8.6
140°-150°	698.5	6.8
150°-160°	511.1	4.9
160°-170°	316.6	3.1
170°-180°	107.4	1.0
0°-30°	903.8	8.7
0°-40°	1478.3	14.3
0°-60°	2615.3	25.3
0°-90°	3313.7	32.1
90°-120°	3385.4	32.8
90°-150°	6087.6	58.9
90°-180°	7023.0	67.9
0°-180°	10336.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1169	1159	1165	1160	1159	111
15°	1125	1115	1120	1119	1115	318
25°	1044	1035	1042	1031	1030	481
35°	924	920	923	912	912	579
45°	781	776	777	768	768	603
55°	613	612	606	600	597	547
65°	427	420	417	411	410	420
75°	221	218	214	212	211	234
85°	44	47	50	50	50	54
90°	0	0	0	0	0	4
95°	56	222	997	345	213	64
105°	228	346	1494	2639	2508	241
115°	423	512	1133	2400	2818	417
125°	598	663	1081	1794	2145	535
135°	731	792	1068	1516	1713	564
145°	862	906	1077	1312	1429	538
155°	984	1008	1103	1185	1234	455
165°	1088	1092	1116	1140	1156	306
175°	1139	1133	1128	1122	1113	108
180°	1131	1131	1131	1131	1131	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1165.1	1165.1	1165.1	1165.1	1165.1
2.5°	1172.7	1162.7	1165.9	1163.3	1160.8
5°	1169.3	1158.9	1165.1	1159.7	1158.7
7.5°	1163.8	1151.5	1154.4	1153.4	1153.4
10°	1158.7	1143.1	1150.2	1144.9	1144.9
12.5°	1145.1	1132.0	1137.5	1134.7	1136.4
15°	1124.7	1115.4	1120.5	1119.3	1115.2
17.5°	1107.1	1095.9	1099.7	1097.7	1096.1
20°	1091.8	1081.5	1084.4	1079.2	1083.4
22.5°	1074.9	1064.5	1070.0	1061.3	1061.3
25°	1044.1	1034.8	1042.0	1031.3	1030.3
27.5°	1011.4	1005.4	1010.1	1002.2	999.3
30°	991.0	981.7	984.7	979.3	977.2
32.5°	967.3	957.9	960.9	951.4	952.6
35°	924.2	920.0	923.1	912.5	911.5
37.5°	885.1	876.8	881.8	873.0	872.2
40°	856.3	848.0	852.0	846.7	846.7
42.5°	830.0	820.8	823.2	816.1	813.6
45°	780.9	775.8	776.7	768.2	768.2
47.5°	732.6	728.8	727.3	718.6	720.3
50°	700.3	694.1	695.0	685.5	685.5
52.5°	663.0	663.4	659.4	653.1	648.1
55°	613.3	612.3	605.9	600.5	597.4
57.5°	560.2	555.5	550.9	543.7	543.1
60°	522.0	518.9	513.6	507.1	504.0
62.5°	483.0	479.9	474.5	469.0	468.4
65°	426.6	420.3	417.0	410.6	409.6
67.5°	365.2	360.2	356.1	351.0	350.4
70°	323.6	319.5	316.2	311.9	308.8
72.5°	285.4	278.8	275.5	272.0	269.7
75°	220.7	217.6	214.3	212.2	211.2
77.5°	158.3	158.5	158.5	155.7	154.7
80°	121.0	122.0	122.0	120.9	119.9
82.5°	87.9	89.7	90.6	89.5	89.3
85°	43.5	46.6	49.9	49.9	49.9
87.5°	11.9	16.0	19.5	20.4	19.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.2	91.2	211.5	61.6	46.4
95°	55.9	221.9	997.3	345.2	212.8
97.5°	102.7	259.9	1535.9	1099.1	753.1
100°	135.4	282.5	1652.8	1674.2	1289.6
102.5°	171.5	306.9	1627.1	2143.0	1807.2
105°	227.8	345.5	1493.8	2638.6	2508.3
107.5°	285.0	390.5	1338.2	2778.3	2894.3
110°	324.6	423.3	1248.8	2724.8	2985.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	362.4	456.1	1188.6	2598.4	2970.0
115°	423.4	511.7	1132.7	2399.6	2817.8
117.5°	477.2	560.0	1099.6	2182.2	2625.2
120°	520.1	589.5	1096.2	2058.0	2482.5
122.5°	554.5	623.9	1087.6	1949.0	2343.2
125°	597.5	662.7	1081.1	1794.1	2145.0
127.5°	644.4	705.3	1077.7	1701.5	1990.7
130°	668.4	729.4	1072.5	1637.1	1889.3
132.5°	694.2	753.5	1072.5	1586.8	1818.8
135°	730.8	791.7	1068.2	1515.5	1713.0
137.5°	765.2	824.4	1067.8	1455.1	1625.8
140°	791.0	851.9	1066.1	1405.1	1569.0
142.5°	820.2	871.0	1071.2	1365.2	1512.3
145°	861.9	906.0	1076.8	1311.6	1429.3
147.5°	897.6	940.4	1086.3	1257.5	1359.2
150°	928.5	957.9	1089.7	1239.6	1311.1
152.5°	952.6	983.7	1093.2	1215.5	1281.9
155°	984.4	1007.5	1102.6	1185.4	1233.7
157.5°	1023.9	1037.8	1104.8	1171.7	1206.2
160°	1044.6	1055.1	1113.4	1161.3	1190.7
162.5°	1056.6	1068.8	1115.1	1152.6	1175.3
165°	1087.6	1091.8	1115.5	1139.5	1156.3
167.5°	1108.6	1104.8	1125.4	1136.3	1143.0
170°	1115.5	1113.4	1122.0	1124.3	1132.7
172.5°	1131.0	1123.8	1127.1	1120.8	1127.5
175°	1139.2	1132.8	1128.4	1121.8	1113.4
177.5°	1142.6	1132.5	1127.1	1120.3	1122.0
180°	1130.6	1130.6	1130.6	1130.6	1130.6

(END OF REPORT)