

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: P522049

Luminaire Tested: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522049
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10765.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

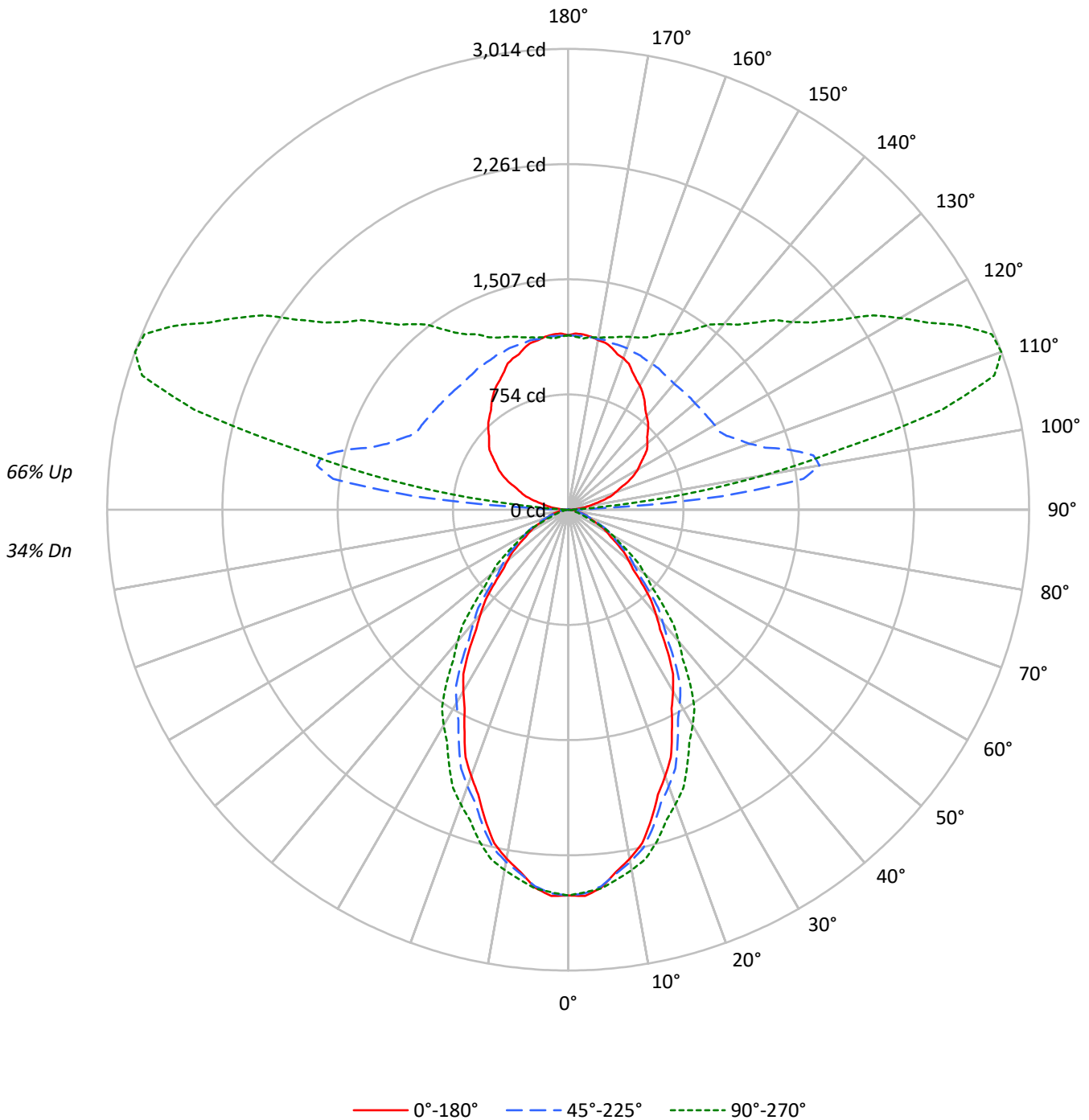
Input Watts (W): 92.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42	34																				
1	95	91	88	84	86	82	80	77	66	64	63	52	50	49	38	37	37	30																				
2	87	80	75	70	79	73	68	64	59	56	53	46	44	42	34	33	32	27																				
3	80	71	65	59	72	65	59	55	53	49	46	42	39	37	31	30	28	24																				
4	74	64	56	51	66	58	52	47	47	43	40	38	35	32	28	27	25	21																				
5	68	57	50	44	61	52	46	41	43	38	35	34	31	28	26	24	22	19																				
6	63	51	44	39	57	47	41	36	39	34	31	31	28	25	24	22	20	17																				
7	58	47	39	34	53	43	36	32	35	31	27	29	25	23	22	20	18	15																				
8	54	43	35	30	49	39	33	28	32	28	24	26	23	20	20	18	17	14																				
9	50	39	32	27	46	36	30	25	30	25	22	24	21	19	19	17	15	13																				
10	47	36	29	25	43	33	27	23	28	23	20	23	19	17	18	16	14	12																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23273	23273	23273
5°	22982	22901	23034
10°	21713	21911	22419
15°	20045	20510	21430
20°	18203	18888	20137
25°	16327	17217	18761
30°	14598	15553	17334
35°	12766	13688	15646
40°	10744	11598	13545
45°	8867	9633	11309
50°	7403	8071	9422
55°	6285	6926	7781
60°	5371	6004	6209
65°	4277	5050	4010
70°	3793	3941	2449
75°	3511	3198	1501
80°	3236	2938	1296
85°	2932	2699	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11309 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.4	2.1
10°-20°	601.8	5.6
20°-30°	779.5	7.2
30°-40°	763.3	7.1
40°-50°	584.3	5.4
50°-60°	389.4	3.6
60°-70°	212.5	2.0
70°-80°	88.5	0.8
80°-90°	25.1	0.2
90°-100°	520.1	4.8
100°-110°	1479.7	13.7
110°-120°	1417.7	13.2
120°-130°	1122.1	10.4
130°-140°	900.6	8.4
140°-150°	705.1	6.5
150°-160°	515.9	4.8
160°-170°	319.6	3.0
170°-180°	108.4	1.0
0°-30°	1612.7	15.0
0°-40°	2376.0	22.1
0°-60°	3349.7	31.1
0°-90°	3675.8	34.1
90°-120°	3417.5	31.7
90°-150°	6145.3	57.1
90°-180°	7089.0	65.9
0°-180°	10765.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2522	2522	2522	2522	2522	
5°	2482	2457	2473	2478	2487	231
15°	2099	2091	2147	2206	2244	586
25°	1604	1608	1691	1765	1843	738
35°	1133	1139	1215	1297	1389	705
45°	680	693	738	794	867	530
55°	391	407	431	447	484	354
65°	196	212	231	202	184	204
75°	98	98	90	62	42	105
85°	28	28	26	16	10	30
90°	0	0	0	0	0	4
95°	56	224	1007	348	215	64
105°	230	349	1508	2664	2532	243
115°	427	516	1143	2422	2844	421
125°	603	669	1091	1811	2165	540
135°	738	799	1078	1530	1729	569
145°	870	915	1087	1324	1443	544
155°	994	1017	1113	1197	1245	459
165°	1098	1102	1126	1150	1167	309
175°	1150	1144	1139	1132	1124	109
180°	1141	1141	1141	1141	1141	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2522.5	2522.5	2522.5	2522.5	2522.5
2.5°	2528.7	2506.2	2511.9	2511.7	2504.8
5°	2481.5	2456.7	2472.7	2478.4	2487.1
7.5°	2389.5	2370.6	2399.9	2421.5	2439.0
10°	2317.7	2301.5	2338.8	2370.3	2393.0
12.5°	2234.5	2220.9	2267.0	2309.3	2339.0
15°	2098.6	2091.0	2147.3	2205.7	2243.6
17.5°	1953.1	1949.5	2014.0	2082.2	2130.7
20°	1854.0	1852.9	1923.7	1994.7	2051.0
22.5°	1753.9	1756.3	1830.7	1904.6	1968.6
25°	1603.8	1608.1	1691.3	1765.0	1842.9
27.5°	1465.0	1467.0	1552.9	1630.7	1713.8
30°	1370.3	1375.7	1459.9	1540.5	1627.1
32.5°	1275.5	1281.8	1364.3	1447.5	1535.9
35°	1133.4	1138.8	1215.3	1297.1	1389.1
37.5°	986.9	994.2	1062.1	1139.5	1229.9
40°	892.1	902.9	963.0	1035.8	1124.6
42.5°	800.9	814.3	870.0	939.1	1019.2
45°	679.6	692.6	738.3	794.2	866.7
47.5°	575.1	590.1	625.1	673.3	735.2
50°	515.8	529.9	562.3	597.9	656.4
52.5°	463.5	477.6	506.5	534.0	583.8
55°	390.7	407.0	430.6	446.9	483.7
57.5°	330.9	346.5	365.3	372.6	394.9
60°	291.1	308.4	325.4	324.6	336.5
62.5°	254.8	269.5	286.5	274.7	275.4
65°	195.9	212.1	231.3	202.1	183.7
67.5°	158.3	161.7	181.5	141.0	119.1
70°	140.6	140.6	146.1	109.2	90.8
72.5°	123.7	123.7	118.7	88.8	69.5
75°	98.5	98.5	89.7	61.5	42.1
77.5°	75.9	75.1	68.6	45.9	30.5
80°	60.9	60.9	55.3	36.3	24.4
82.5°	47.6	47.6	42.9	28.3	18.2
85°	27.7	27.7	25.5	16.5	10.0
87.5°	9.7	9.7	8.9	5.3	4.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.4	92.0	213.5	62.1	46.9
95°	56.4	224.0	1006.8	348.5	214.8
97.5°	103.7	262.4	1550.5	1109.5	760.3
100°	136.7	285.2	1668.5	1690.1	1301.8
102.5°	173.1	309.8	1642.5	2163.3	1824.3
105°	230.0	348.8	1508.0	2663.6	2532.1
107.5°	287.7	394.2	1350.9	2804.6	2921.8
110°	327.6	427.3	1260.6	2750.7	3013.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	365.8	460.4	1199.9	2623.0	2998.1
115°	427.4	516.5	1143.4	2422.3	2844.5
117.5°	481.7	565.3	1110.0	2202.9	2650.1
120°	525.1	595.1	1106.6	2077.5	2506.0
122.5°	559.8	629.8	1097.9	1967.4	2365.4
125°	603.2	669.0	1091.4	1811.1	2165.4
127.5°	650.5	712.0	1087.9	1717.7	2009.6
130°	674.8	736.3	1082.7	1652.6	1907.2
132.5°	700.8	760.6	1082.7	1601.8	1836.0
135°	737.7	799.2	1078.4	1529.8	1729.3
137.5°	772.4	832.2	1077.9	1468.9	1641.2
140°	798.5	860.0	1076.2	1418.4	1583.9
142.5°	828.0	879.3	1081.4	1378.1	1526.6
145°	870.1	914.6	1087.0	1324.1	1442.9
147.5°	906.1	949.4	1096.6	1269.5	1372.1
150°	937.3	967.0	1100.1	1251.4	1323.5
152.5°	961.6	993.0	1103.5	1227.0	1294.0
155°	993.7	1017.1	1113.1	1196.6	1245.4
157.5°	1033.7	1047.7	1115.2	1182.9	1217.7
160°	1054.5	1065.1	1123.9	1172.3	1202.0
162.5°	1066.6	1078.9	1125.7	1163.5	1186.4
165°	1097.9	1102.1	1126.1	1150.3	1167.3
167.5°	1119.1	1115.3	1136.1	1147.1	1153.9
170°	1126.1	1124.0	1132.6	1135.0	1143.4
172.5°	1141.7	1134.5	1137.8	1131.4	1138.2
175°	1150.0	1143.6	1139.1	1132.4	1123.9
177.5°	1153.4	1143.2	1137.8	1130.9	1132.6
180°	1141.3	1141.3	1141.3	1141.3	1141.3

(END OF REPORT)