

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: P522036

Luminaire Tested: SQ4-WB-150U-075D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P522036  
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-075D-92765-1D-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 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: 9885.4 lumens  
Efficiency: N/A  
Efficacy: 119.8 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

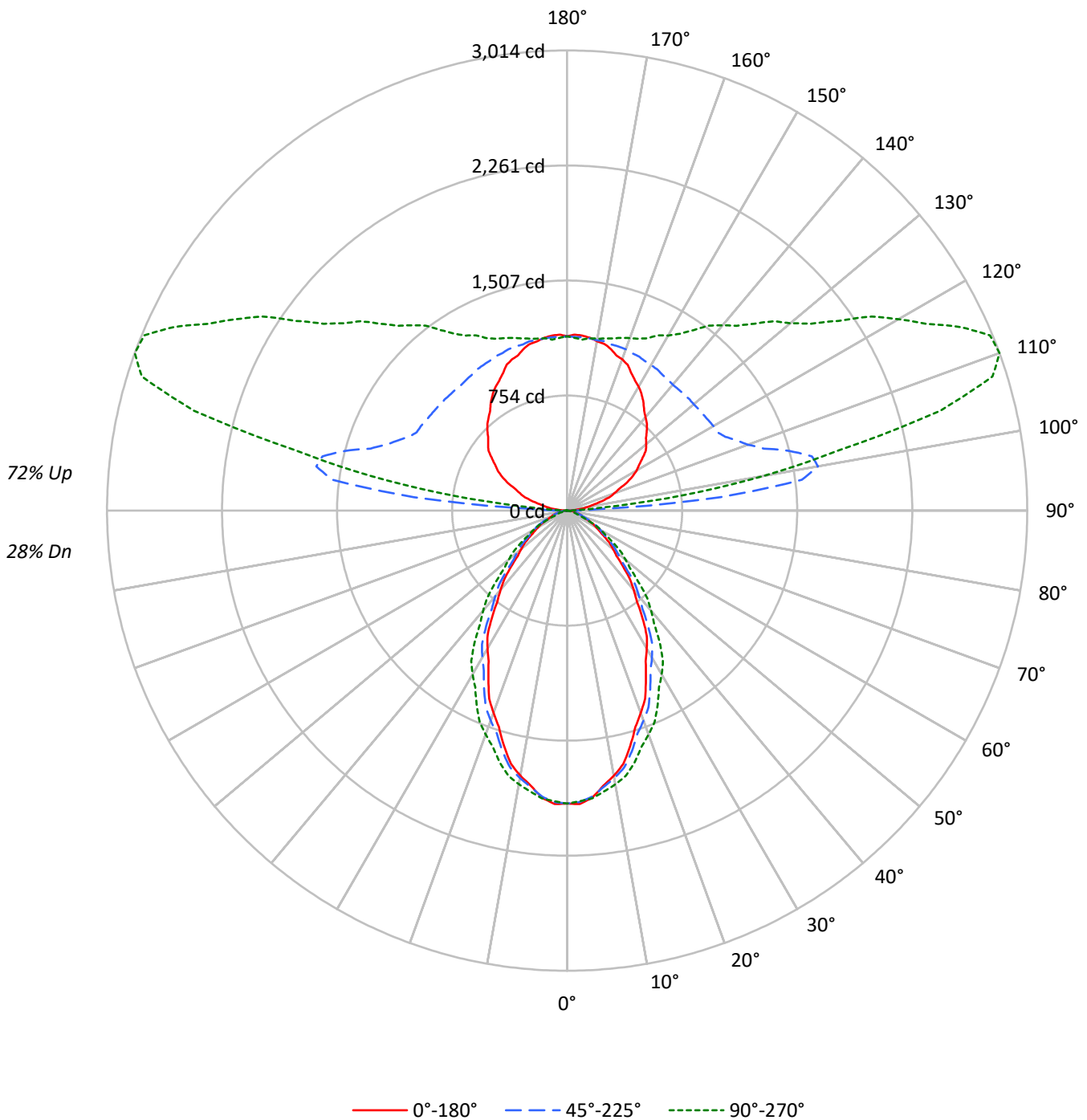
Input Watts (W): 82.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	94	90	86	83	84	80	78	75	63	61	60	47	46	45	33	32	32	25				
2	86	79	73	69	77	71	66	62	56	53	50	42	41	39	30	29	28	22				
3	79	70	63	58	70	63	57	53	50	46	43	38	36	34	27	26	24	20				
4	72	62	55	50	65	56	50	45	45	41	37	34	32	29	25	23	22	17				
5	66	56	48	43	59	50	44	39	40	36	32	31	28	26	22	21	19	16				
6	61	50	43	37	55	46	39	34	37	32	29	28	25	23	21	19	17	14				
7	57	45	38	33	51	41	35	30	33	29	25	26	23	20	19	17	16	13				
8	53	41	34	29	47	38	31	27	31	26	23	24	21	18	18	16	14	12				
9	49	38	31	26	44	34	28	24	28	24	20	22	19	17	16	14	13	11				
10	46	35	28	23	41	32	26	22	26	21	18	20	17	15	15	13	12	10				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17704	17704	17704
5°	17483	17421	17522
10°	16518	16668	17054
15°	15248	15602	16302
20°	13847	14368	15319
25°	12420	13098	14271
30°	11105	11832	13186
35°	9711	10413	11902
40°	8173	8822	10304
45°	6746	7328	8602
50°	5632	6139	7167
55°	4781	5268	5918
60°	4085	4567	4724
65°	3253	3842	3052
70°	2884	2997	1861
75°	2670	2431	1141
80°	2460	2237	983
85°	2223	2054	805

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8602 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.0	1.8
10°-20°	457.8	4.6
20°-30°	593.0	6.0
30°-40°	580.7	5.9
40°-50°	444.5	4.5
50°-60°	296.2	3.0
60°-70°	161.6	1.6
70°-80°	67.3	0.7
80°-90°	19.1	0.2
90°-100°	520.1	5.3
100°-110°	1479.7	15.0
110°-120°	1417.7	14.3
120°-130°	1122.1	11.4
130°-140°	900.6	9.1
140°-150°	705.1	7.1
150°-160°	515.9	5.2
160°-170°	319.6	3.2
170°-180°	108.4	1.1
0°-30°	1226.8	12.4
0°-40°	1807.5	18.3
0°-60°	2548.1	25.8
0°-90°	2796.1	28.3
90°-120°	3417.5	34.6
90°-150°	6145.3	62.2
90°-180°	7089.0	71.7
0°-180°	9885.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1919	1919	1919	1919	1919	
5°	1888	1869	1881	1885	1892	176
15°	1596	1591	1633	1678	1707	446
25°	1220	1223	1287	1343	1402	561
35°	862	866	924	987	1057	536
45°	517	527	562	604	659	403
55°	297	310	328	340	368	269
65°	149	161	176	154	140	155
75°	75	75	68	47	32	80
85°	21	21	19	12	8	23
90°	0	0	0	0	0	3
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°	1918.9	1918.9	1918.9	1918.9	1918.9
2.5°	1923.6	1906.5	1910.8	1910.7	1905.4
5°	1887.7	1868.8	1881.0	1885.4	1891.9
7.5°	1817.7	1803.3	1825.6	1842.1	1855.4
10°	1763.1	1750.8	1779.1	1803.1	1820.4
12.5°	1699.8	1689.4	1724.6	1756.7	1779.3
15°	1596.4	1590.6	1633.4	1677.9	1706.7
17.5°	1485.8	1483.0	1532.1	1583.9	1620.8
20°	1410.3	1409.5	1463.4	1517.4	1560.2
22.5°	1334.2	1336.0	1392.6	1448.8	1497.6
25°	1220.0	1223.3	1286.6	1342.6	1401.9
27.5°	1114.4	1115.9	1181.3	1240.5	1303.7
30°	1042.4	1046.5	1110.6	1171.9	1237.7
32.5°	970.3	975.1	1037.8	1101.2	1168.3
35°	862.2	866.3	924.5	986.7	1056.7
37.5°	750.7	756.3	808.0	866.8	935.6
40°	678.6	686.9	732.5	787.9	855.5
42.5°	609.3	619.5	661.8	714.4	775.3
45°	517.0	526.9	561.6	604.1	659.3
47.5°	437.5	448.9	475.6	512.2	559.2
50°	392.4	403.1	427.7	454.8	499.3
52.5°	352.6	363.3	385.3	406.2	444.1
55°	297.2	309.6	327.5	340.0	367.9
57.5°	251.8	263.6	277.9	283.5	300.4
60°	221.4	234.6	247.5	246.9	256.0
62.5°	193.8	205.0	217.9	209.0	209.5
65°	149.0	161.4	176.0	153.8	139.8
67.5°	120.4	123.0	138.1	107.2	90.6
70°	106.9	106.9	111.1	83.0	69.0
72.5°	94.1	94.1	90.3	67.5	52.9
75°	74.9	74.9	68.2	46.8	32.0
77.5°	57.8	57.1	52.2	34.9	23.2
80°	46.3	46.3	42.1	27.6	18.5
82.5°	36.2	36.2	32.7	21.5	13.8
85°	21.0	21.0	19.4	12.5	7.6
87.5°	7.4	7.4	6.7	4.0	3.4
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)