

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: P522046

Luminaire Tested: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522046
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10399.1 lumens
Efficiency: N/A
Efficacy: 111.3 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

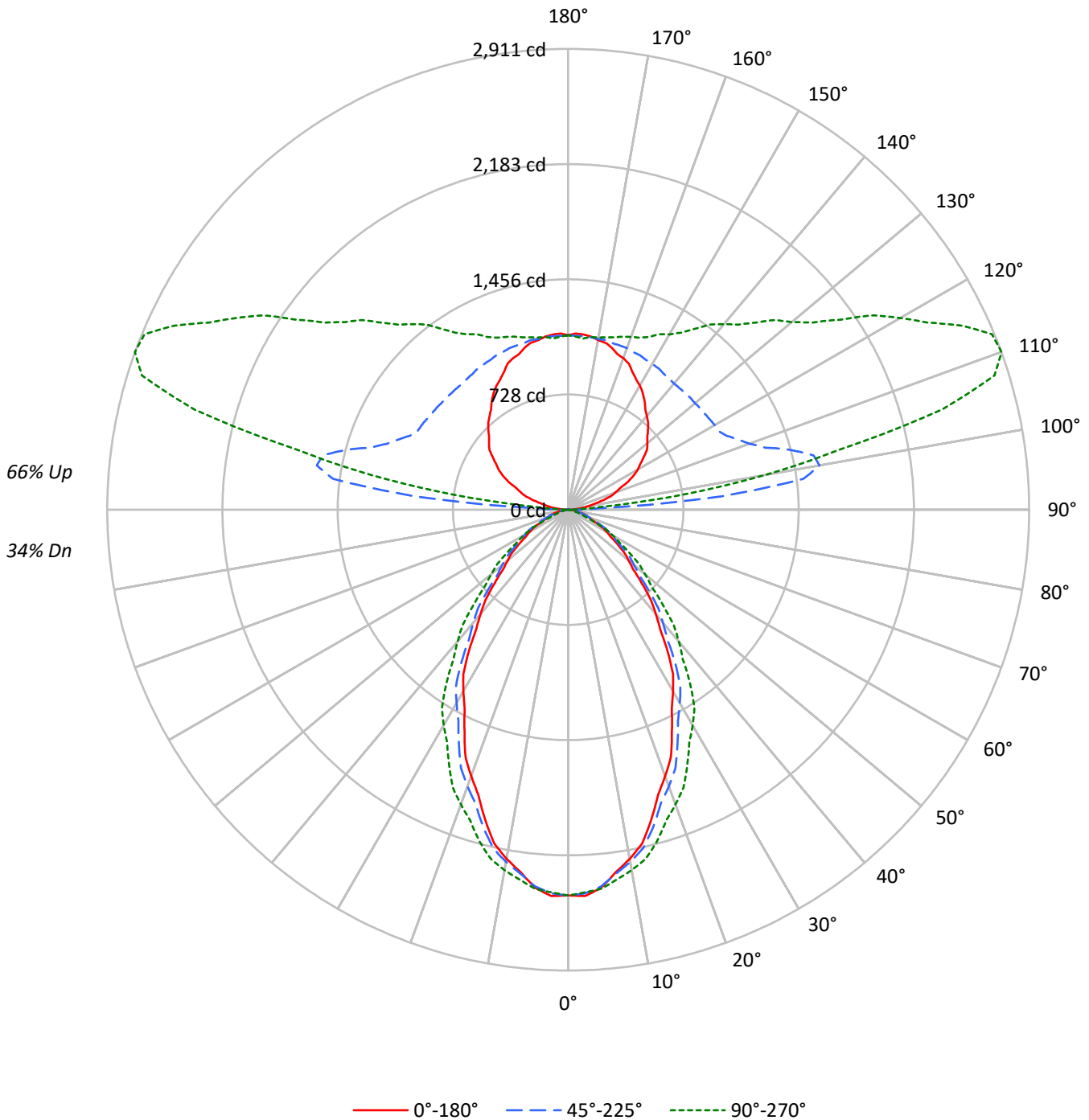
Input Watts (W): 93.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	22482	22482	22482
5°	22202	22122	22251
10°	20975	21166	21657
15°	19363	19813	20701
20°	17584	18245	19453
25°	15772	16632	18123
30°	14102	15025	16745
35°	12332	13223	15114
40°	10379	11203	13083
45°	8566	9306	10924
50°	7152	7797	9100
55°	6071	6690	7515
60°	5189	5801	5997
65°	4133	4879	3875
70°	3663	3806	2366
75°	3394	3087	1447
80°	3124	2843	1249
85°	2826	2604	1016

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.5	2.1
10°-20°	581.4	5.6
20°-30°	753.0	7.2
30°-40°	737.4	7.1
40°-50°	564.4	5.4
50°-60°	376.1	3.6
60°-70°	205.2	2.0
70°-80°	85.5	0.8
80°-90°	24.2	0.2
90°-100°	502.4	4.8
100°-110°	1429.4	13.7
110°-120°	1369.6	13.2
120°-130°	1083.9	10.4
130°-140°	870.0	8.4
140°-150°	681.1	6.5
150°-160°	498.4	4.8
160°-170°	308.7	3.0
170°-180°	104.8	1.0
0°-30°	1557.9	15.0
0°-40°	2295.3	22.1
0°-60°	3235.8	31.1
0°-90°	3550.8	34.1
90°-120°	3301.4	31.7
90°-150°	5936.5	57.1
90°-180°	6848.0	65.9
0°-180°	10399.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2437	2437	2437	2437	2437	
5°	2397	2373	2389	2394	2402	223
15°	2027	2020	2074	2131	2167	566
25°	1549	1554	1634	1705	1780	712
35°	1095	1100	1174	1253	1342	681
45°	656	669	713	767	837	512
55°	377	393	416	432	467	342
65°	189	205	224	195	178	197
75°	95	95	87	59	41	102
85°	27	27	25	16	10	29
90°	0	0	0	0	0	4
95°	54	216	972	337	208	62
105°	222	337	1457	2573	2446	235
115°	413	499	1105	2340	2748	407
125°	583	646	1054	1750	2092	522
135°	713	772	1042	1478	1670	550
145°	840	884	1050	1279	1394	525
155°	960	982	1075	1156	1203	444
165°	1061	1065	1088	1111	1128	298
175°	1111	1105	1100	1094	1086	105
180°	1102	1102	1102	1102	1102	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2436.8	2436.8	2436.8	2436.8	2436.8
2.5°	2442.7	2421.0	2426.5	2426.3	2419.6
5°	2397.2	2373.1	2388.6	2394.2	2402.5
7.5°	2308.2	2290.0	2318.3	2339.2	2356.1
10°	2238.9	2223.3	2259.3	2289.7	2311.7
12.5°	2158.5	2145.4	2190.0	2230.8	2259.5
15°	2027.2	2019.9	2074.3	2130.7	2167.3
17.5°	1886.7	1883.2	1945.6	2011.4	2058.3
20°	1790.9	1789.9	1858.3	1926.9	1981.3
22.5°	1694.3	1696.6	1768.5	1839.8	1901.7
25°	1549.3	1553.5	1633.8	1705.0	1780.3
27.5°	1415.2	1417.1	1500.1	1575.3	1655.6
30°	1323.7	1328.9	1410.3	1488.1	1571.8
32.5°	1232.2	1238.2	1317.9	1398.3	1483.7
35°	1094.9	1100.1	1174.0	1253.0	1341.9
37.5°	953.3	960.4	1026.0	1100.7	1188.1
40°	861.8	872.2	930.2	1000.6	1086.3
42.5°	773.7	786.7	840.4	907.2	984.5
45°	656.5	669.0	713.2	767.2	837.2
47.5°	555.6	570.0	603.9	650.4	710.2
50°	498.3	511.8	543.2	577.6	634.0
52.5°	447.8	461.4	489.3	515.8	563.9
55°	377.4	393.1	415.9	431.7	467.2
57.5°	319.7	334.8	352.8	360.0	381.5
60°	281.2	297.9	314.4	313.5	325.0
62.5°	246.1	260.4	276.7	265.4	266.0
65°	189.3	204.9	223.5	195.3	177.5
67.5°	152.9	156.2	175.4	136.2	115.0
70°	135.8	135.8	141.1	105.4	87.7
72.5°	119.5	119.5	114.6	85.8	67.1
75°	95.2	95.2	86.6	59.4	40.6
77.5°	73.3	72.5	66.3	44.4	29.5
80°	58.8	58.8	53.5	35.0	23.5
82.5°	46.0	46.0	41.5	27.4	17.5
85°	26.7	26.7	24.6	15.9	9.6
87.5°	9.4	9.4	8.6	5.1	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.8	88.9	206.2	60.0	45.3
95°	54.5	216.4	972.5	336.6	207.5
97.5°	100.2	253.5	1497.8	1071.8	734.4
100°	132.0	275.5	1611.8	1632.6	1257.6
102.5°	167.3	299.2	1586.6	2089.8	1762.3
105°	222.2	336.9	1456.7	2573.1	2446.0
107.5°	277.9	380.8	1305.0	2709.3	2822.4
110°	316.5	412.8	1217.8	2657.2	2911.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	353.4	444.8	1159.1	2533.9	2896.2
115°	412.9	499.0	1104.6	2340.0	2747.8
117.5°	465.3	546.1	1072.3	2128.0	2560.0
120°	507.2	574.9	1068.9	2006.9	2420.8
122.5°	540.8	608.4	1060.6	1900.6	2285.0
125°	582.7	646.2	1054.3	1749.5	2091.8
127.5°	628.4	687.8	1050.9	1659.3	1941.3
130°	651.8	711.3	1045.9	1596.4	1842.4
132.5°	677.0	734.8	1045.9	1547.4	1773.6
135°	712.6	772.1	1041.7	1477.8	1670.5
137.5°	746.2	804.0	1041.3	1419.0	1585.4
140°	771.3	830.7	1039.6	1370.2	1530.1
142.5°	799.8	849.4	1044.6	1331.3	1474.7
145°	840.5	883.5	1050.1	1279.1	1393.8
147.5°	875.3	917.1	1059.3	1226.3	1325.5
150°	905.5	934.2	1062.7	1208.9	1278.5
152.5°	928.9	959.3	1066.0	1185.3	1250.0
155°	960.0	982.5	1075.2	1156.0	1203.1
157.5°	998.5	1012.0	1077.3	1142.6	1176.3
160°	1018.6	1028.9	1085.7	1132.5	1161.2
162.5°	1030.4	1042.3	1087.4	1123.9	1146.1
165°	1060.6	1064.7	1087.8	1111.2	1127.6
167.5°	1081.1	1077.4	1097.4	1108.1	1114.6
170°	1087.8	1085.8	1094.1	1096.4	1104.6
172.5°	1102.9	1095.9	1099.1	1093.0	1099.5
175°	1110.9	1104.7	1100.4	1093.9	1085.7
177.5°	1114.2	1104.4	1099.1	1092.5	1094.1
180°	1102.5	1102.5	1102.5	1102.5	1102.5

(END OF REPORT)