

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: P522047

Luminaire Tested: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522047
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10514.1 lumens
Efficiency: N/A
Efficacy: 112.6 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

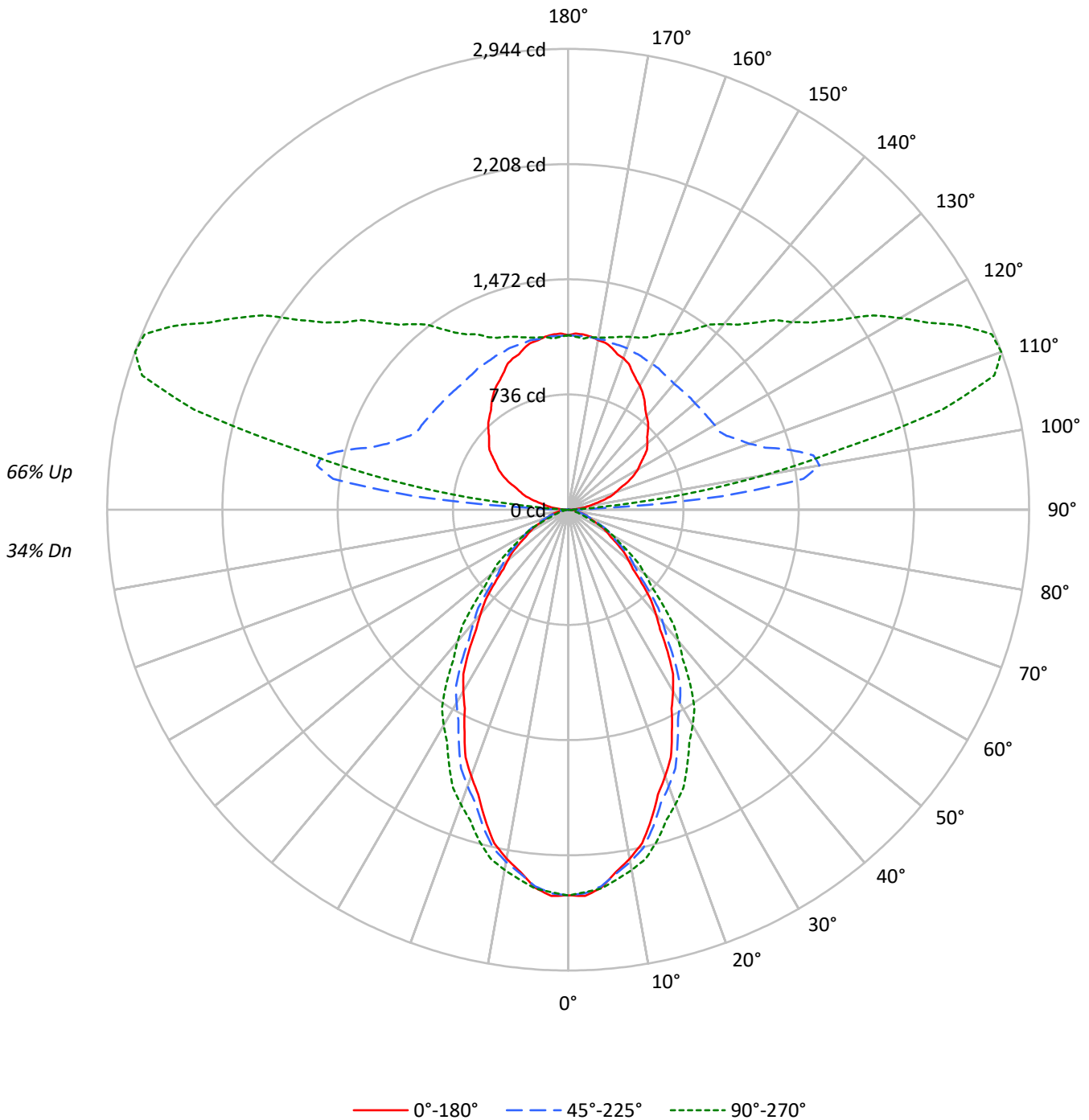
Input Watts (W): 93.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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°	22731	22731	22731
5°	22447	22367	22497
10°	21208	21401	21896
15°	19578	20032	20931
20°	17779	18448	19668
25°	15946	16815	18324
30°	14258	15191	16929
35°	12468	13369	15281
40°	10494	11327	13228
45°	8661	9409	11045
50°	7231	7883	9202
55°	6138	6764	7599
60°	5246	5864	6063
65°	4176	4932	3919
70°	3704	3849	2390
75°	3429	3123	1465
80°	3161	2874	1265
85°	2858	2636	1027

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11045 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.0	2.1
10°-20°	587.8	5.6
20°-30°	761.4	7.2
30°-40°	745.6	7.1
40°-50°	570.7	5.4
50°-60°	380.3	3.6
60°-70°	207.5	2.0
70°-80°	86.5	0.8
80°-90°	24.5	0.2
90°-100°	507.9	4.8
100°-110°	1445.2	13.7
110°-120°	1384.7	13.2
120°-130°	1095.9	10.4
130°-140°	879.7	8.4
140°-150°	688.7	6.5
150°-160°	503.9	4.8
160°-170°	312.1	3.0
170°-180°	105.9	1.0
0°-30°	1575.1	15.0
0°-40°	2320.7	22.1
0°-60°	3271.6	31.1
0°-90°	3590.1	34.1
90°-120°	3337.9	31.7
90°-150°	6002.1	57.1
90°-180°	6924.0	65.9
0°-180°	10514.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2464	2464	2464	2464	2464	
5°	2424	2399	2415	2421	2429	225
15°	2050	2042	2097	2154	2191	572
25°	1566	1571	1652	1724	1800	720
35°	1107	1112	1187	1267	1357	688
45°	664	676	721	776	846	518
55°	382	398	420	436	472	346
65°	191	207	226	197	180	199
75°	96	96	88	60	41	103
85°	27	27	25	16	10	29
90°	0	0	0	0	0	4
95°	55	219	983	340	210	63
105°	225	341	1473	2602	2473	238
115°	418	504	1117	2366	2778	411
125°	589	653	1066	1769	2115	527
135°	720	781	1053	1494	1689	556
145°	850	893	1062	1293	1409	531
155°	971	993	1087	1169	1216	449
165°	1072	1076	1100	1124	1140	302
175°	1123	1117	1113	1106	1098	106
180°	1115	1115	1115	1115	1115	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2463.7	2463.7	2463.7	2463.7	2463.7
2.5°	2469.8	2447.8	2453.3	2453.2	2446.4
5°	2423.7	2399.4	2415.1	2420.7	2429.1
7.5°	2333.8	2315.4	2343.9	2365.1	2382.2
10°	2263.7	2247.9	2284.3	2315.0	2337.2
12.5°	2182.4	2169.1	2214.2	2255.5	2284.5
15°	2049.7	2042.3	2097.2	2154.3	2191.3
17.5°	1907.6	1904.0	1967.1	2033.7	2081.0
20°	1810.8	1809.7	1878.9	1948.2	2003.2
22.5°	1713.0	1715.4	1788.1	1860.2	1922.8
25°	1566.4	1570.7	1651.8	1723.8	1800.0
27.5°	1430.9	1432.8	1516.7	1592.7	1673.9
30°	1338.3	1343.6	1425.9	1504.6	1589.1
32.5°	1245.8	1251.9	1332.5	1413.8	1500.1
35°	1107.0	1112.3	1187.0	1266.9	1356.7
37.5°	963.9	971.1	1037.4	1112.9	1201.3
40°	871.3	881.9	940.5	1011.7	1098.3
42.5°	782.2	795.4	849.7	917.2	995.4
45°	663.8	676.4	721.1	775.6	846.5
47.5°	561.7	576.3	610.6	657.6	718.0
50°	503.8	517.5	549.2	584.0	641.1
52.5°	452.7	466.5	494.7	521.5	570.1
55°	381.6	397.5	420.5	436.5	472.4
57.5°	323.2	338.5	356.7	363.9	385.7
60°	284.3	301.2	317.8	317.0	328.6
62.5°	248.9	263.2	279.8	268.3	269.0
65°	191.3	207.2	225.9	197.4	179.5
67.5°	154.6	158.0	177.3	137.7	116.3
70°	137.3	137.3	142.7	106.6	88.6
72.5°	120.9	120.9	115.9	86.7	67.9
75°	96.2	96.2	87.6	60.1	41.1
77.5°	74.2	73.3	67.0	44.8	29.8
80°	59.5	59.5	54.1	35.4	23.8
82.5°	46.5	46.5	41.9	27.7	17.7
85°	27.0	27.0	24.9	16.1	9.7
87.5°	9.5	9.5	8.6	5.2	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.0	89.9	208.5	60.7	45.8
95°	55.1	218.8	983.3	340.3	209.8
97.5°	101.3	256.3	1514.4	1083.6	742.6
100°	133.5	278.6	1629.6	1650.7	1271.5
102.5°	169.1	302.6	1604.2	2112.9	1781.8
105°	224.6	340.7	1472.8	2601.5	2473.1
107.5°	281.0	385.0	1319.4	2739.3	2853.7
110°	320.0	417.4	1231.2	2686.6	2943.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.3	449.7	1171.9	2561.9	2928.3
115°	417.5	504.5	1116.8	2365.9	2778.2
117.5°	470.5	552.1	1084.2	2151.6	2588.3
120°	512.8	581.2	1080.8	2029.1	2447.6
122.5°	546.7	615.1	1072.3	1921.6	2310.3
125°	589.1	653.4	1065.9	1768.9	2114.9
127.5°	635.3	695.4	1062.5	1677.6	1962.8
130°	659.1	719.1	1057.5	1614.1	1862.7
132.5°	684.5	742.9	1057.5	1564.5	1793.2
135°	720.5	780.6	1053.2	1494.2	1689.0
137.5°	754.4	812.9	1052.8	1434.7	1602.9
140°	779.9	839.9	1051.1	1385.4	1547.0
142.5°	808.7	858.8	1056.2	1346.0	1491.0
145°	849.8	893.3	1061.7	1293.2	1409.2
147.5°	885.0	927.2	1071.0	1239.9	1340.2
150°	915.5	944.5	1074.4	1222.2	1292.7
152.5°	939.2	969.9	1077.8	1198.4	1263.9
155°	970.6	993.4	1087.1	1168.7	1216.4
157.5°	1009.6	1023.2	1089.2	1155.3	1189.3
160°	1029.9	1040.3	1097.7	1145.0	1174.0
162.5°	1041.8	1053.8	1099.4	1136.4	1158.8
165°	1072.3	1076.4	1099.8	1123.5	1140.1
167.5°	1093.1	1089.3	1109.6	1120.3	1127.0
170°	1099.8	1097.8	1106.2	1108.5	1116.8
172.5°	1115.1	1108.1	1111.3	1105.1	1111.7
175°	1123.2	1116.9	1112.6	1106.0	1097.7
177.5°	1126.5	1116.6	1111.3	1104.5	1106.2
180°	1114.7	1114.7	1114.7	1114.7	1114.7

(END OF REPORT)