

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: P522020

Luminaire Tested: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522020
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-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 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: 8651.9 lumens
Efficiency: N/A
Efficacy: 120.5 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

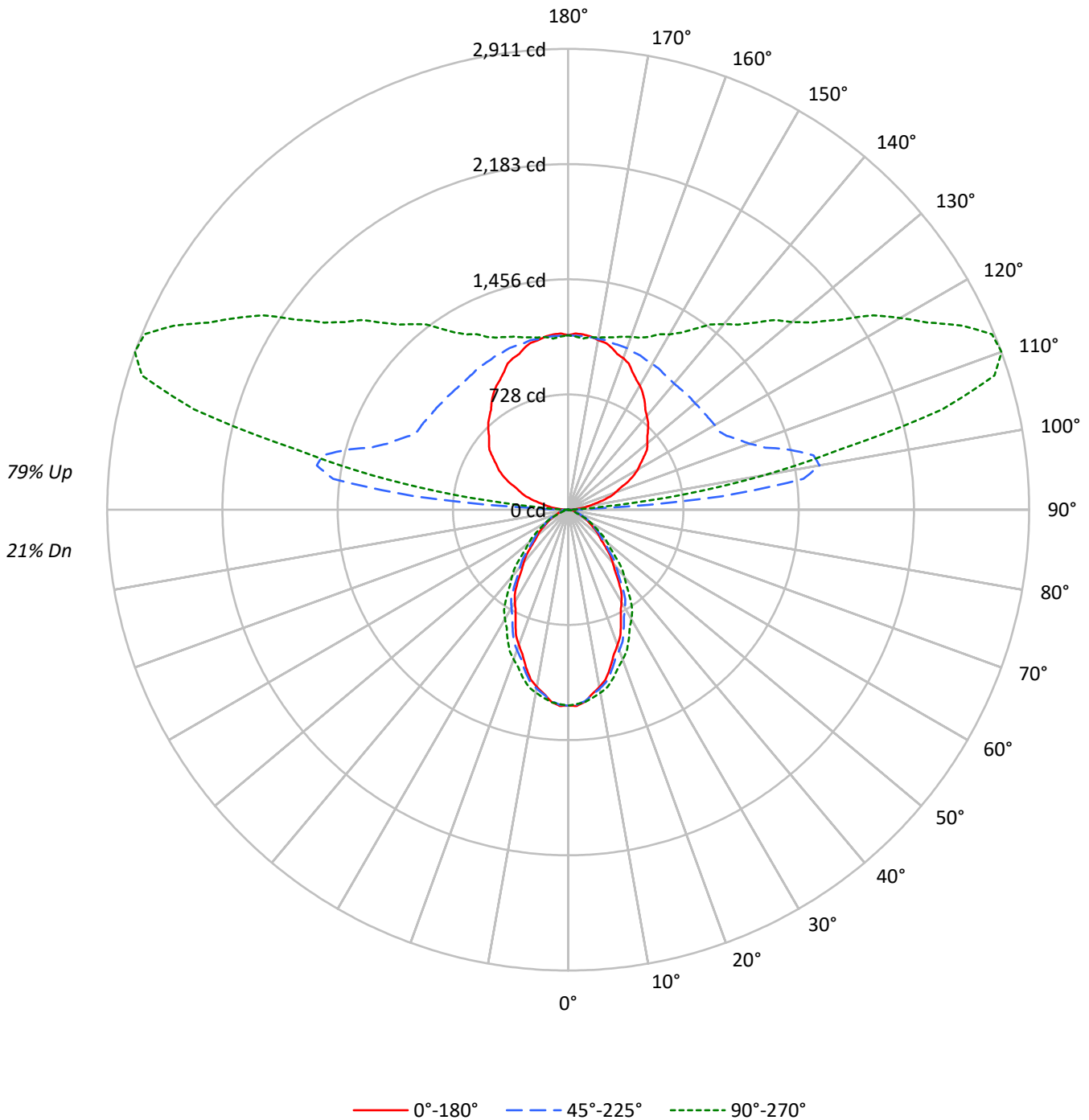
Input Watts (W): 71.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21				
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	19				
2	84	77	72	67	74	69	64	60	53	50	47	38	36	34	24	23	22	16				
3	77	68	62	56	68	61	55	51	47	43	40	34	31	30	22	21	20	14				
4	70	61	53	48	62	54	48	43	42	38	34	30	28	26	20	18	17	13				
5	65	54	47	41	57	48	42	37	37	33	30	27	25	23	18	17	15	12				
6	60	48	41	36	53	43	37	32	34	29	26	25	22	20	17	15	14	10				
7	55	44	36	31	49	39	33	29	31	26	23	23	20	18	15	14	12	9				
8	51	40	33	28	45	36	30	25	28	24	21	21	18	16	14	12	11	9				
9	48	36	29	25	42	33	27	22	26	21	18	19	16	14	13	11	10	8				
10	44	33	26	22	39	30	24	20	24	19	17	18	15	13	12	11	9	7				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11419	11419	11419
5°	11277	11237	11302
10°	10654	10751	11001
15°	9835	10064	10515
20°	8932	9268	9881
25°	8011	8448	9206
30°	7163	7631	8506
35°	6263	6716	7677
40°	5272	5691	6646
45°	4351	4726	5548
50°	3633	3960	4623
55°	3084	3399	3817
60°	2635	2947	3046
65°	2098	2478	1969
70°	1861	1934	1200
75°	1722	1568	734
80°	1589	1445	632
85°	1440	1323	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5548 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	1.3
10°-20°	295.3	3.4
20°-30°	382.5	4.4
30°-40°	374.5	4.3
40°-50°	286.7	3.3
50°-60°	191.0	2.2
60°-70°	104.3	1.2
70°-80°	43.4	0.5
80°-90°	12.3	0.1
90°-100°	502.4	5.8
100°-110°	1429.4	16.5
110°-120°	1369.6	15.8
120°-130°	1083.9	12.5
130°-140°	870.0	10.1
140°-150°	681.1	7.9
150°-160°	498.4	5.8
160°-170°	308.7	3.6
170°-180°	104.8	1.2
0°-30°	791.3	9.1
0°-40°	1165.9	13.5
0°-60°	1643.6	19.0
0°-90°	1803.6	20.8
90°-120°	3301.4	38.2
90°-150°	5936.5	68.6
90°-180°	6848.0	79.2
0°-180°	8651.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1218	1205	1213	1216	1220	113
15°	1030	1026	1054	1082	1101	288
25°	787	789	830	866	904	362
35°	556	559	596	636	682	346
45°	334	340	362	390	425	260
55°	192	200	211	219	237	174
65°	96	104	114	99	90	100
75°	48	48	44	30	21	52
85°	14	14	12	8	5	15
90°	0	0	0	0	0	3
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°	1237.7	1237.7	1237.7	1237.7	1237.7
2.5°	1240.8	1229.7	1232.5	1232.4	1229.0
5°	1217.6	1205.4	1213.3	1216.1	1220.3
7.5°	1172.4	1163.2	1177.5	1188.2	1196.8
10°	1137.2	1129.3	1147.6	1163.0	1174.2
12.5°	1096.4	1089.7	1112.4	1133.1	1147.7
15°	1029.7	1026.0	1053.6	1082.3	1100.9
17.5°	958.4	956.5	988.2	1021.7	1045.5
20°	909.7	909.2	943.9	978.7	1006.4
22.5°	860.6	861.8	898.3	934.5	966.0
25°	786.9	789.1	829.9	866.0	904.3
27.5°	718.8	719.8	762.0	800.2	840.9
30°	672.4	675.0	716.3	755.9	798.4
32.5°	625.9	628.9	669.4	710.3	753.6
35°	556.1	558.8	596.3	636.5	681.6
37.5°	484.2	487.8	521.2	559.1	603.5
40°	437.7	443.0	472.5	508.2	551.8
42.5°	393.0	399.6	426.9	460.8	500.1
45°	333.5	339.8	362.2	389.7	425.2
47.5°	282.2	289.5	306.7	330.4	360.7
50°	253.1	260.0	275.9	293.4	322.1
52.5°	227.4	234.4	248.5	262.0	286.4
55°	191.7	199.7	211.3	219.3	237.3
57.5°	162.4	170.0	179.2	182.8	193.8
60°	142.8	151.3	159.7	159.3	165.1
62.5°	125.0	132.2	140.6	134.8	135.1
65°	96.1	104.1	113.5	99.2	90.2
67.5°	77.7	79.4	89.1	69.2	58.4
70°	69.0	69.0	71.7	53.6	44.5
72.5°	60.7	60.7	58.2	43.6	34.1
75°	48.3	48.3	44.0	30.2	20.6
77.5°	37.3	36.8	33.7	22.5	15.0
80°	29.9	29.9	27.2	17.8	11.9
82.5°	23.4	23.4	21.1	13.9	8.9
85°	13.6	13.6	12.5	8.1	4.9
87.5°	4.8	4.8	4.3	2.6	2.2
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)