

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: P522019

Luminaire Tested: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P522019  
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\_4000K  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8514.5 lumens  
Efficiency: N/A  
Efficacy: 118.4 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

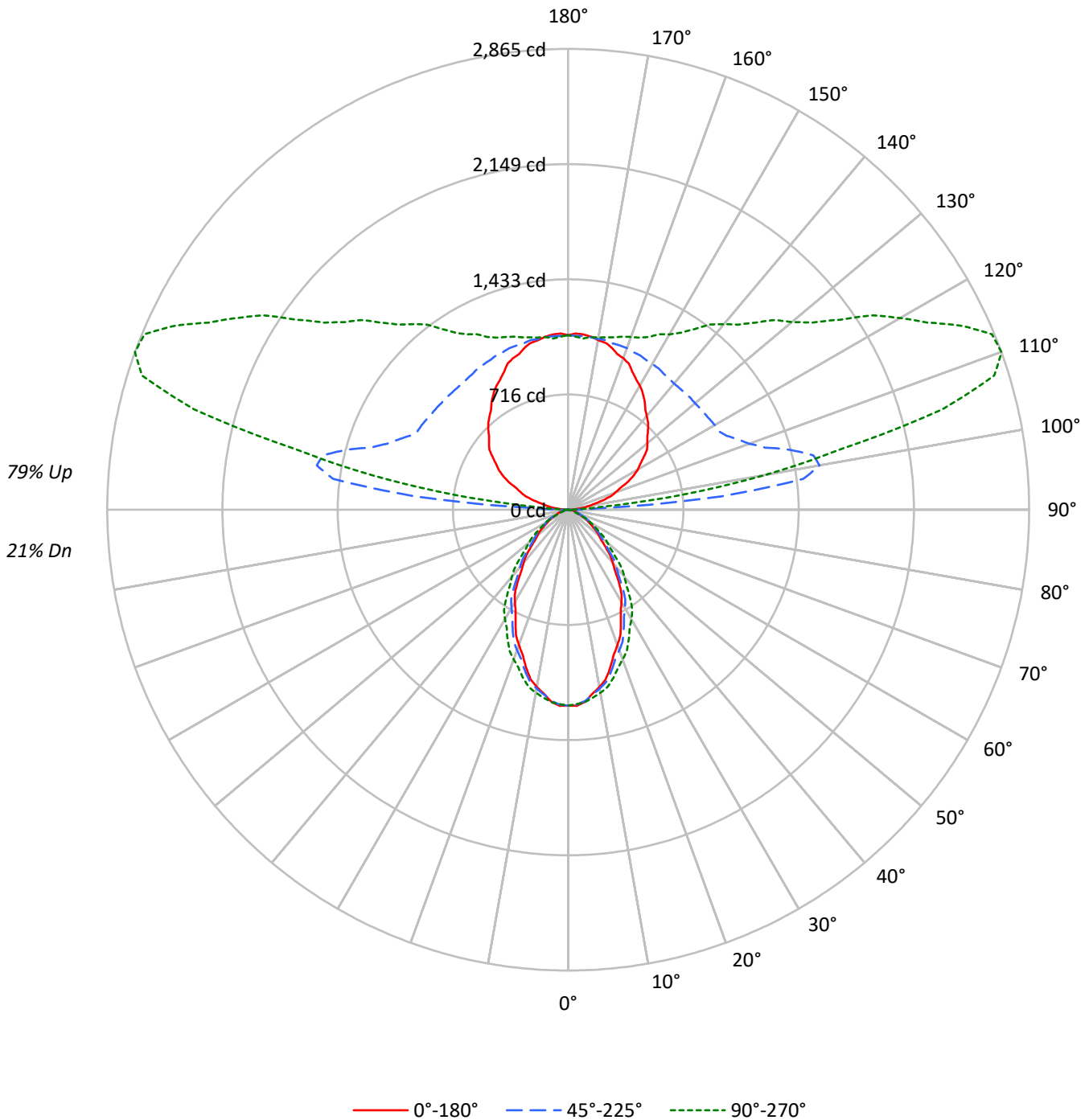
Input Watts (W): 71.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	11238	11238	11238
5°	11098	11058	11123
10°	10485	10580	10825
15°	9680	9904	10348
20°	8789	9120	9724
25°	7884	8314	9059
30°	7049	7511	8370
35°	6164	6610	7555
40°	5189	5600	6540
45°	4282	4652	5461
50°	3575	3897	4549
55°	3035	3344	3758
60°	2594	2899	2999
65°	2065	2439	1936
70°	1832	1904	1182
75°	1697	1544	724
80°	1562	1419	627
85°	1419	1302	508

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5461 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	1.3
10°-20°	290.6	3.4
20°-30°	376.4	4.4
30°-40°	368.6	4.3
40°-50°	282.1	3.3
50°-60°	188.0	2.2
60°-70°	102.6	1.2
70°-80°	42.8	0.5
80°-90°	12.1	0.1
90°-100°	494.4	5.8
100°-110°	1406.7	16.5
110°-120°	1347.8	15.8
120°-130°	1066.7	12.5
130°-140°	856.2	10.1
140°-150°	670.3	7.9
150°-160°	490.5	5.8
160°-170°	303.8	3.6
170°-180°	103.1	1.2
0°-30°	778.7	9.1
0°-40°	1147.4	13.5
0°-60°	1617.5	19.0
0°-90°	1775.0	20.8
90°-120°	3249.0	38.2
90°-150°	5842.2	68.6
90°-180°	6740.0	79.2
0°-180°	8514.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1198	1186	1194	1197	1201	111
15°	1013	1010	1037	1065	1083	283
25°	774	776	817	852	890	356
35°	547	550	587	626	671	340
45°	328	334	356	384	418	256
55°	189	196	208	216	234	171
65°	95	102	112	98	89	98
75°	48	48	43	30	20	51
85°	13	13	12	8	5	15
90°	0	0	0	0	0	3
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1221.1	1210.2	1212.9	1212.9	1209.5
5°	1198.3	1186.3	1194.0	1196.8	1201.0
7.5°	1153.8	1144.7	1158.9	1169.3	1177.8
10°	1119.2	1111.4	1129.3	1144.6	1155.5
12.5°	1079.0	1072.4	1094.7	1115.1	1129.5
15°	1013.4	1009.7	1036.9	1065.1	1083.4
17.5°	943.1	941.4	972.5	1005.5	1028.9
20°	895.2	894.7	928.9	963.2	990.4
22.5°	846.9	848.1	884.0	919.7	950.6
25°	774.5	776.5	816.7	852.3	889.9
27.5°	707.4	708.4	749.9	787.4	827.6
30°	661.7	664.3	705.0	743.9	785.7
32.5°	615.9	619.0	658.8	699.0	741.6
35°	547.3	549.9	586.9	626.3	670.8
37.5°	476.5	480.1	512.9	550.2	593.9
40°	430.8	436.0	465.0	500.2	543.0
42.5°	386.7	393.2	420.1	453.5	492.1
45°	328.2	334.4	356.5	383.5	418.5
47.5°	277.7	284.9	301.9	325.1	355.0
50°	249.1	255.9	271.5	288.7	316.9
52.5°	223.8	230.6	244.6	257.8	281.9
55°	188.7	196.5	207.9	215.8	233.6
57.5°	159.8	167.3	176.4	179.9	190.7
60°	140.6	148.9	157.1	156.7	162.5
62.5°	123.0	130.1	138.3	132.7	133.0
65°	94.6	102.4	111.7	97.6	88.7
67.5°	76.4	78.1	87.7	68.1	57.5
70°	67.9	67.9	70.6	52.7	43.8
72.5°	59.8	59.8	57.3	42.9	33.6
75°	47.6	47.6	43.3	29.7	20.3
77.5°	36.7	36.2	33.1	22.2	14.8
80°	29.4	29.4	26.7	17.5	11.8
82.5°	23.0	23.0	20.7	13.7	8.8
85°	13.4	13.4	12.3	7.9	4.8
87.5°	4.7	4.7	4.3	2.6	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)