

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: P522016

Luminaire Tested: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P522016  
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\_2700K  
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 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7999.8 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

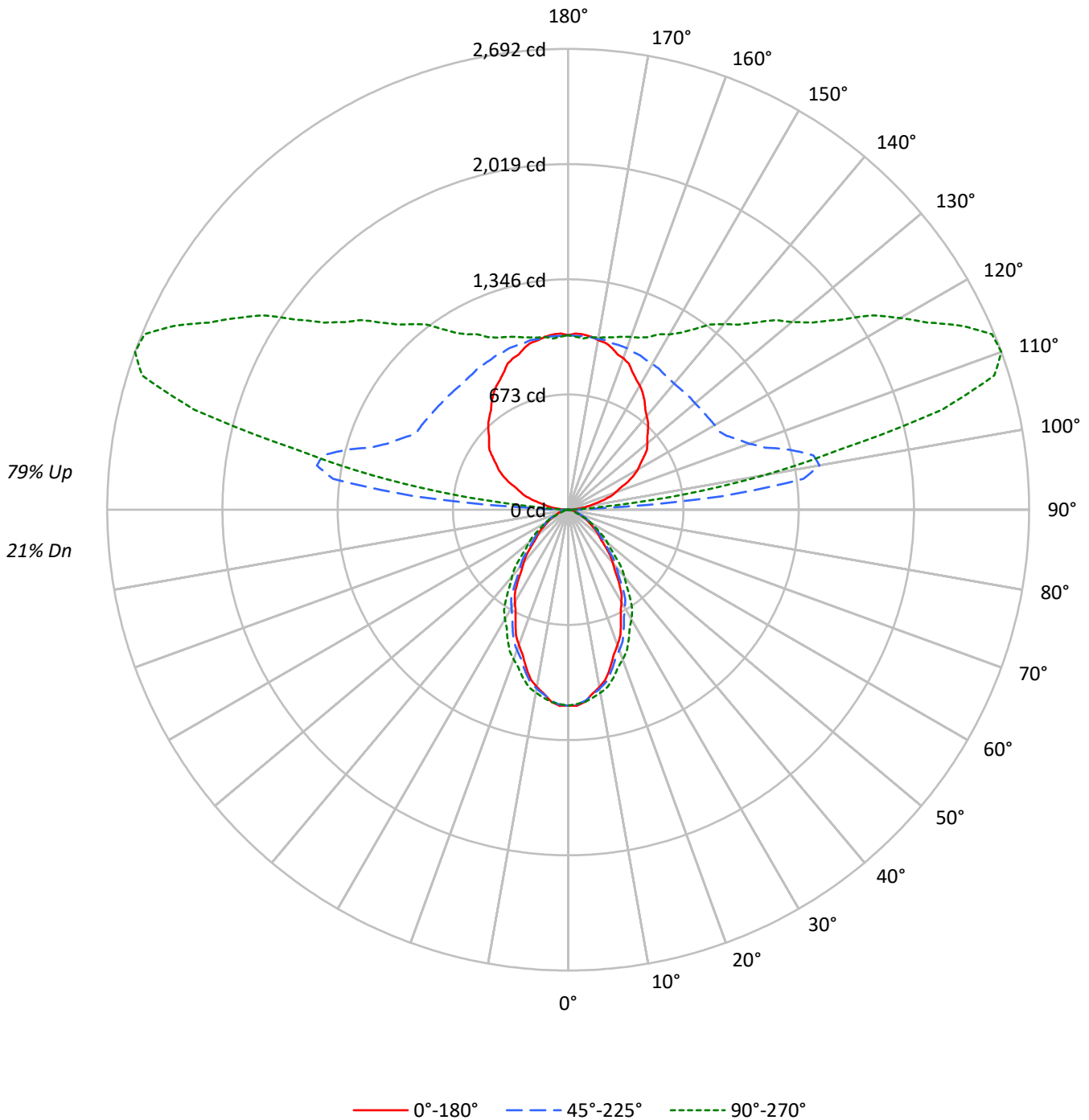
Input Watts (W): 71.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	10558	10558	10558
5°	10427	10389	10451
10°	9851	9941	10171
15°	9094	9305	9723
20°	8258	8569	9136
25°	7407	7811	8511
30°	6623	7057	7864
35°	5791	6210	7098
40°	4874	5262	6145
45°	4023	4370	5130
50°	3359	3662	4274
55°	2852	3141	3529
60°	2438	2724	2818
65°	1941	2292	1821
70°	1721	1788	1111
75°	1593	1451	681
80°	1466	1334	584
85°	1334	1217	476

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5130 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.0	1.3
10°-20°	273.0	3.4
20°-30°	353.7	4.4
30°-40°	346.3	4.3
40°-50°	265.1	3.3
50°-60°	176.6	2.2
60°-70°	96.4	1.2
70°-80°	40.2	0.5
80°-90°	11.4	0.1
90°-100°	464.5	5.8
100°-110°	1321.7	16.5
110°-120°	1266.3	15.8
120°-130°	1002.2	12.5
130°-140°	804.5	10.1
140°-150°	629.8	7.9
150°-160°	460.8	5.8
160°-170°	285.4	3.6
170°-180°	96.9	1.2
0°-30°	731.7	9.1
0°-40°	1078.0	13.5
0°-60°	1519.7	19.0
0°-90°	1667.7	20.8
90°-120°	3052.5	38.2
90°-150°	5489.0	68.6
90°-180°	6332.0	79.2
0°-180°	7999.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1126	1115	1122	1124	1128	105
15°	952	949	974	1001	1018	266
25°	728	730	767	801	836	335
35°	514	517	551	588	630	320
45°	308	314	335	360	393	240
55°	177	185	195	203	219	161
65°	89	96	105	92	83	92
75°	45	45	41	28	19	48
85°	13	13	12	8	4	14
90°	0	0	0	0	0	3
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1144.4	1144.4	1144.4	1144.4	1144.4
2.5°	1147.3	1137.0	1139.6	1139.5	1136.4
5°	1125.9	1114.6	1121.8	1124.4	1128.4
7.5°	1084.1	1075.5	1088.8	1098.6	1106.6
10°	1051.5	1044.2	1061.1	1075.4	1085.7
12.5°	1013.8	1007.6	1028.5	1047.7	1061.2
15°	952.1	948.7	974.2	1000.7	1017.9
17.5°	886.1	884.5	913.7	944.7	966.7
20°	841.1	840.6	872.8	905.0	930.5
22.5°	795.7	796.8	830.6	864.1	893.2
25°	727.6	729.6	767.3	800.8	836.1
27.5°	664.7	665.6	704.5	739.8	777.6
30°	621.7	624.1	662.4	698.9	738.2
32.5°	578.7	581.5	619.0	656.7	696.8
35°	514.2	516.7	551.4	588.5	630.2
37.5°	447.7	451.1	481.9	517.0	558.0
40°	404.7	409.7	436.9	469.9	510.2
42.5°	363.4	369.5	394.7	426.1	462.4
45°	308.3	314.2	334.9	360.3	393.2
47.5°	260.9	267.7	283.6	305.5	333.5
50°	234.0	240.4	255.1	271.3	297.8
52.5°	210.3	216.7	229.8	242.3	264.8
55°	177.3	184.6	195.3	202.8	219.4
57.5°	150.1	157.2	165.7	169.1	179.2
60°	132.1	139.9	147.6	147.3	152.7
62.5°	115.6	122.3	130.0	124.6	124.9
65°	88.9	96.2	105.0	91.7	83.4
67.5°	71.8	73.4	82.4	64.0	54.0
70°	63.8	63.8	66.3	49.5	41.2
72.5°	56.1	56.1	53.8	40.3	31.5
75°	44.7	44.7	40.7	27.9	19.1
77.5°	34.4	34.1	31.1	20.8	13.9
80°	27.6	27.6	25.1	16.4	11.0
82.5°	21.6	21.6	19.5	12.9	8.2
85°	12.6	12.6	11.5	7.5	4.5
87.5°	4.4	4.4	4.0	2.4	2.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)