

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: P521293

Luminaire Tested: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521293  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 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: 8278.0 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

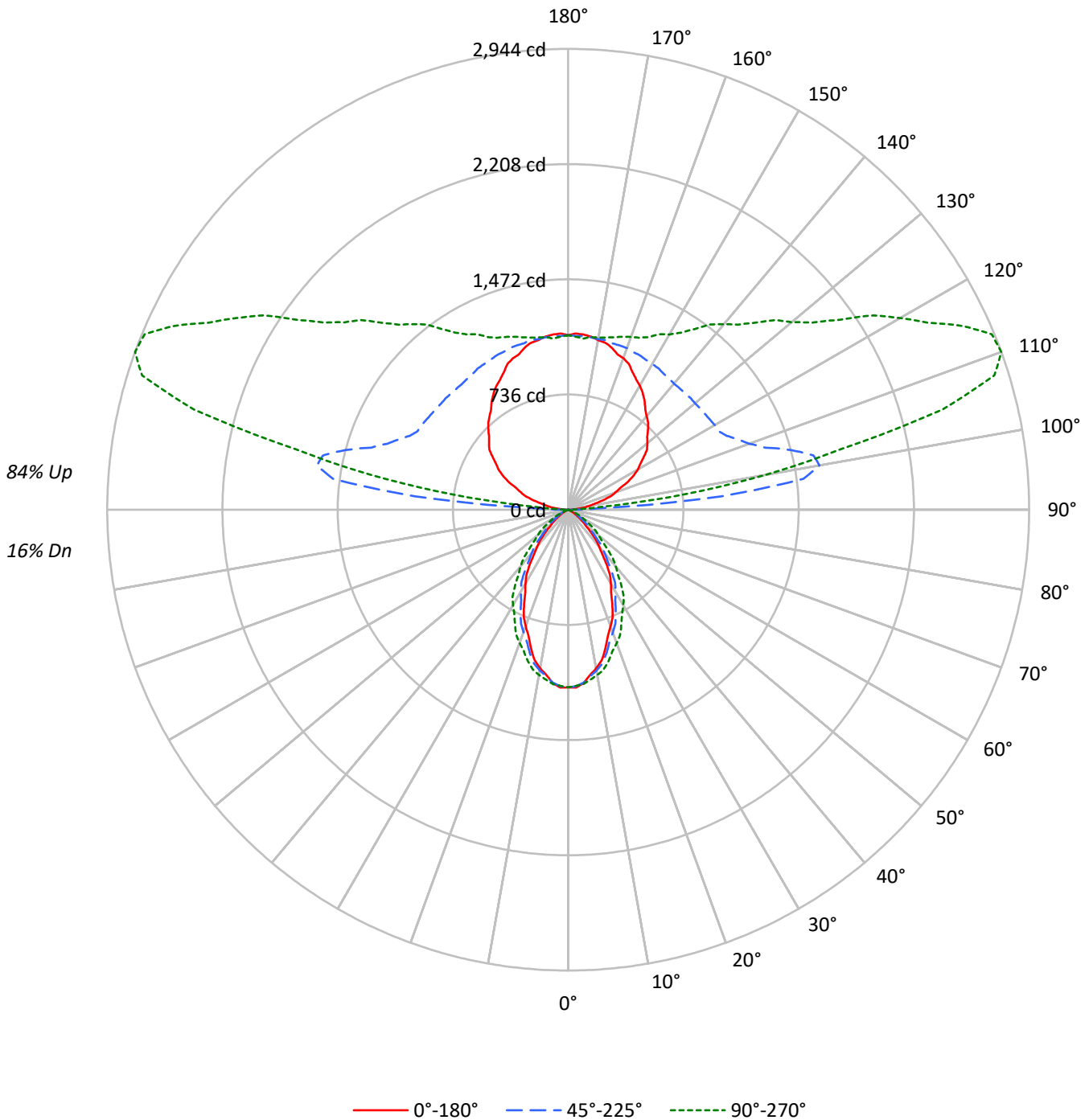
Input Watts (W): 71.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25	16																			
1	91	87	83	80	80	77	74	71	57	56	54	40	39	38	23	23	22	15																			
2	83	77	71	67	73	68	63	59	51	48	46	35	34	32	21	20	20	13																			
3	76	68	61	56	67	60	55	50	45	42	39	32	30	28	19	18	17	12																			
4	70	60	53	48	61	53	48	43	41	37	34	29	26	24	18	16	16	11																			
5	64	54	46	41	56	48	42	37	36	32	29	26	23	21	16	15	14	10																			
6	59	48	41	36	52	43	37	32	33	29	26	24	21	19	15	14	13	9																			
7	55	44	36	31	48	39	33	28	30	26	23	22	19	17	14	12	11	8																			
8	51	40	32	28	45	35	29	25	27	23	20	20	17	15	13	11	10	8																			
9	47	36	29	25	42	32	26	22	25	21	18	18	16	14	12	10	9	7																			
10	44	33	26	22	39	30	24	20	23	19	16	17	14	12	11	10	9	7																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10472	10472	10472
5°	10303	10277	10354
10°	9640	9770	10042
15°	8765	9043	9546
20°	7780	8184	8901
25°	6775	7311	8178
30°	5803	6441	7494
35°	4812	5467	6667
40°	3697	4372	5681
45°	2672	3310	4571
50°	1820	2467	3626
55°	1184	1784	2818
60°	679	1257	2037
65°	179	766	1030
70°	89	237	297
75°	39	18	0
80°	27	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4571 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	1.3
10°-20°	264.9	3.2
20°-30°	331.6	4.0
30°-40°	306.3	3.7
40°-50°	205.8	2.5
50°-60°	106.3	1.3
60°-70°	33.3	0.4
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	507.9	6.1
100°-110°	1445.2	17.5
110°-120°	1384.7	16.7
120°-130°	1095.9	13.2
130°-140°	879.7	10.6
140°-150°	688.7	8.3
150°-160°	503.9	6.1
160°-170°	312.1	3.8
170°-180°	105.9	1.3
0°-30°	700.1	8.5
0°-40°	1006.4	12.2
0°-60°	1318.5	15.9
0°-90°	1354.0	16.4
90°-120°	3337.9	40.3
90°-150°	6002.1	72.5
90°-180°	6924.0	83.6
0°-180°	8278.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1112	1101	1110	1114	1118	103
15°	918	914	947	978	999	256
25°	666	671	718	767	803	305
35°	427	438	485	542	592	265
45°	205	217	254	303	350	161
55°	74	86	111	142	175	69
65°	8	16	35	42	47	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
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°	1135.0	1135.0	1135.0	1135.0	1135.0
2.5°	1137.6	1126.9	1129.7	1129.7	1126.7
5°	1112.5	1101.2	1109.7	1113.7	1118.0
7.5°	1065.5	1056.7	1073.1	1085.3	1094.3
10°	1029.0	1021.5	1042.8	1059.5	1071.9
12.5°	986.9	981.1	1006.7	1029.7	1045.5
15°	917.6	914.3	946.7	978.4	999.4
17.5°	843.3	843.2	880.1	919.6	944.8
20°	792.4	794.0	833.5	877.0	906.6
22.5°	741.4	745.2	787.4	832.8	866.6
25°	665.5	670.9	718.2	767.4	803.3
27.5°	592.6	600.4	650.3	701.3	745.1
30°	544.7	553.8	604.6	658.3	703.4
32.5°	497.7	508.6	558.0	614.8	660.8
35°	427.2	437.9	485.4	542.5	591.9
37.5°	354.4	364.9	411.3	467.5	520.9
40°	307.0	318.8	363.0	417.5	471.7
42.5°	263.9	275.7	317.3	370.8	422.0
45°	204.8	217.2	253.7	303.1	350.3
47.5°	155.8	169.3	201.3	246.0	289.1
50°	126.8	140.3	171.9	211.2	252.6
52.5°	103.6	116.6	145.1	182.2	220.1
55°	73.6	85.9	110.9	142.4	175.2
57.5°	50.8	61.5	83.9	110.2	135.8
60°	36.8	47.0	68.1	89.4	110.4
62.5°	24.5	33.8	54.5	70.8	84.9
65°	8.2	15.8	35.1	42.4	47.2
67.5°	4.2	5.0	18.5	19.5	21.1
70°	3.3	3.3	8.8	9.4	11.0
72.5°	2.4	2.4	3.5	4.5	4.8
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)