

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: P521759

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521759  
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-050U-050D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 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: 3997.6 lumens  
Efficiency: N/A  
Efficacy: 109.5 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: General Diffuse

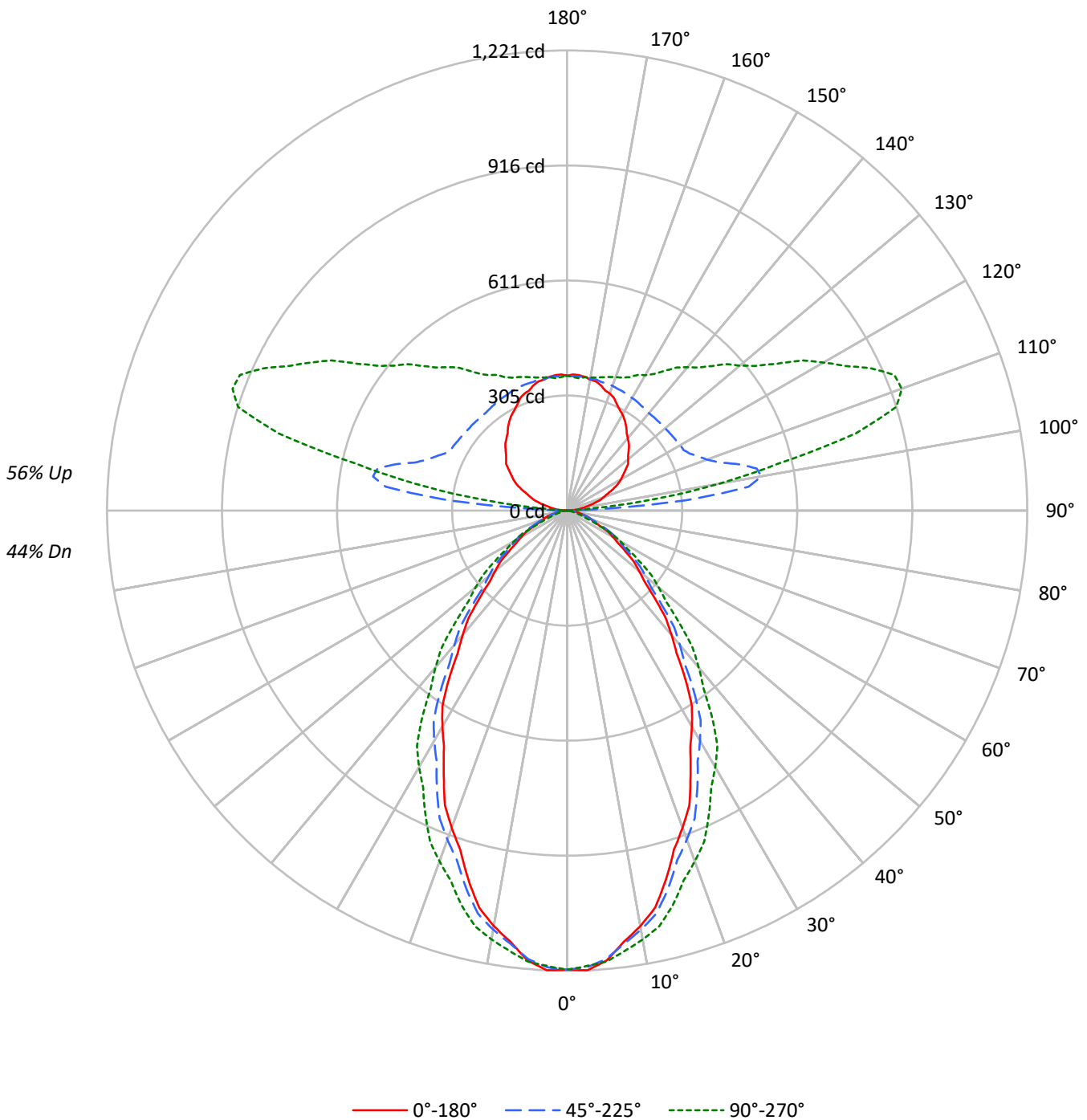
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	40	35				
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35	31				
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28	25				
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25	22				
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21	18				
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19	17				
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	19	18	16				

**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	2.8
10°-20°	290.6	7.3
20°-30°	376.4	9.4
30°-40°	368.6	9.2
40°-50°	282.1	7.1
50°-60°	188.0	4.7
60°-70°	102.6	2.6
70°-80°	42.8	1.1
80°-90°	12.1	0.3
90°-100°	163.0	4.1
100°-110°	463.9	11.6
110°-120°	444.5	11.1
120°-130°	351.8	8.8
130°-140°	282.4	7.1
140°-150°	221.1	5.5
150°-160°	161.8	4.0
160°-170°	100.2	2.5
170°-180°	34.0	0.9
0°-30°	778.7	19.5
0°-40°	1147.4	28.7
0°-60°	1617.5	40.5
0°-90°	1775.0	44.4
90°-120°	1071.5	26.8
90°-150°	1926.7	48.2
90°-180°	2223.0	55.6
0°-180°	3997.6	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	1
95°	18	70	316	109	67	20
105°	72	109	473	835	794	76
115°	134	162	358	760	892	132
125°	189	210	342	568	679	169
135°	231	251	338	480	542	178
145°	273	287	341	415	452	170
155°	312	319	349	375	390	144
165°	344	346	353	361	366	97
175°	360	358	357	355	352	34
180°	358	358	358	358	358	

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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°	5.4	28.9	66.9	19.5	14.7
95°	17.7	70.2	315.6	109.3	67.3
97.5°	32.5	82.3	486.1	347.8	238.4
100°	42.9	89.4	523.1	529.9	408.2
102.5°	54.3	97.1	515.0	678.3	572.0
105°	72.1	109.4	472.8	835.1	793.9
107.5°	90.2	123.6	423.5	879.3	916.0
110°	102.7	134.0	395.2	862.4	944.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	114.7	144.4	376.2	822.4	940.0
115°	134.0	161.9	358.5	759.5	891.8
117.5°	151.0	177.2	348.0	690.7	830.9
120°	164.6	186.6	346.9	651.3	785.7
122.5°	175.5	197.5	344.2	616.8	741.6
125°	189.1	209.7	342.2	567.8	678.9
127.5°	203.9	223.2	341.1	538.5	630.1
130°	211.6	230.9	339.5	518.1	598.0
132.5°	219.7	238.5	339.5	502.2	575.6
135°	231.3	250.6	338.1	479.6	542.2
137.5°	242.2	260.9	338.0	460.5	514.6
140°	250.3	269.6	337.4	444.7	496.6
142.5°	259.6	275.7	339.0	432.1	478.6
145°	272.8	286.8	340.8	415.1	452.4
147.5°	284.1	297.6	343.8	398.0	430.2
150°	293.9	303.2	344.9	392.3	415.0
152.5°	301.5	311.3	346.0	384.7	405.7
155°	311.6	318.9	349.0	375.2	390.5
157.5°	324.1	328.5	349.7	370.9	381.8
160°	330.6	333.9	352.4	367.6	376.9
162.5°	334.4	338.3	352.9	364.8	372.0
165°	344.2	345.5	353.1	360.7	366.0
167.5°	350.9	349.7	356.2	359.6	361.8
170°	353.1	352.4	355.1	355.8	358.5
172.5°	358.0	355.7	356.7	354.7	356.9
175°	360.5	358.5	357.1	355.0	352.4
177.5°	361.6	358.4	356.7	354.6	355.1
180°	357.8	357.8	357.8	357.8	357.8

(END OF REPORT)