

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: P521762

Luminaire Tested: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521762  
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\_5700K  
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 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4165.6 lumens  
Efficiency: N/A  
Efficacy: 114.4 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: General Diffuse

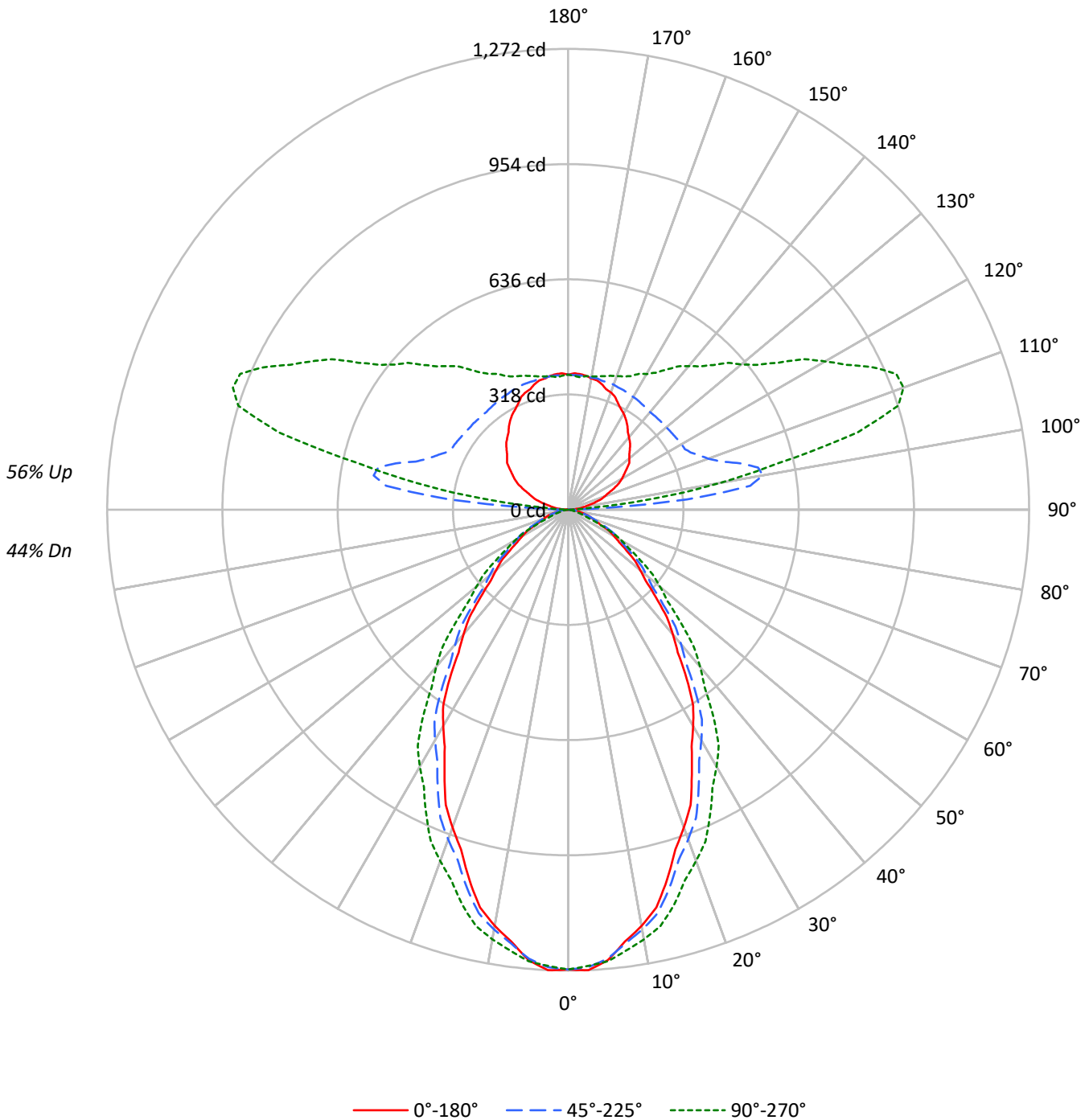
Input Watts (W): 36.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	11710	11710	11710
5°	11564	11523	11590
10°	10926	11025	11281
15°	10086	10320	10783
20°	9160	9503	10133
25°	8215	8663	9440
30°	7346	7826	8722
35°	6423	6887	7872
40°	5407	5835	6814
45°	4462	4847	5690
50°	3725	4061	4741
55°	3162	3484	3915
60°	2703	3021	3124
65°	2153	2541	2019
70°	1907	1983	1233
75°	1768	1608	756
80°	1626	1477	654
85°	1471	1355	529

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5690 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.4	2.8
10°-20°	302.8	7.3
20°-30°	392.2	9.4
30°-40°	384.1	9.2
40°-50°	294.0	7.1
50°-60°	195.9	4.7
60°-70°	106.9	2.6
70°-80°	44.6	1.1
80°-90°	12.6	0.3
90°-100°	169.9	4.1
100°-110°	483.4	11.6
110°-120°	463.2	11.1
120°-130°	366.6	8.8
130°-140°	294.2	7.1
140°-150°	230.4	5.5
150°-160°	168.5	4.0
160°-170°	104.4	2.5
170°-180°	35.4	0.9
0°-30°	811.5	19.5
0°-40°	1195.6	28.7
0°-60°	1685.5	40.5
0°-90°	1849.5	44.4
90°-120°	1116.5	26.8
90°-150°	2007.7	48.2
90°-180°	2316.0	55.6
0°-180°	4165.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1249	1236	1244	1247	1251	116
15°	1056	1052	1080	1110	1129	295
25°	807	809	851	888	927	371
35°	570	573	612	653	699	355
45°	342	348	372	400	436	267
55°	197	205	217	225	243	178
65°	99	107	116	102	92	102
75°	50	50	45	31	21	53
85°	14	14	13	8	5	15
90°	0	0	0	0	0	1
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1272.4	1261.0	1263.9	1263.8	1260.3
5°	1248.6	1236.1	1244.2	1247.1	1251.4
7.5°	1202.3	1192.8	1207.5	1218.4	1227.2
10°	1166.2	1158.0	1176.8	1192.6	1204.1
12.5°	1124.3	1117.5	1140.7	1162.0	1176.9
15°	1055.9	1052.1	1080.4	1109.8	1128.9
17.5°	982.8	980.9	1013.4	1047.7	1072.1
20°	932.9	932.3	967.9	1003.7	1032.0
22.5°	882.5	883.7	921.2	958.3	990.6
25°	807.0	809.2	851.0	888.1	927.3
27.5°	737.2	738.1	781.4	820.5	862.3
30°	689.5	692.2	734.6	775.1	818.7
32.5°	641.8	645.0	686.5	728.4	772.8
35°	570.3	573.0	611.5	652.7	698.9
37.5°	496.6	500.3	534.4	573.3	618.9
40°	448.9	454.3	484.5	521.2	565.8
42.5°	403.0	409.7	437.7	472.5	512.8
45°	342.0	348.5	371.5	399.6	436.1
47.5°	289.4	296.9	314.6	338.8	369.9
50°	259.5	266.6	282.9	300.9	330.3
52.5°	233.2	240.3	254.9	268.7	293.7
55°	196.6	204.8	216.6	224.9	243.4
57.5°	166.5	174.4	183.8	187.5	198.7
60°	146.5	155.2	163.7	163.3	169.3
62.5°	128.2	135.6	144.1	138.2	138.6
65°	98.6	106.7	116.4	101.7	92.5
67.5°	79.6	81.4	91.3	70.9	59.9
70°	70.7	70.7	73.5	54.9	45.7
72.5°	62.3	62.3	59.7	44.7	35.0
75°	49.6	49.6	45.1	31.0	21.2
77.5°	38.2	37.8	34.5	23.1	15.4
80°	30.6	30.6	27.8	18.2	12.3
82.5°	23.9	23.9	21.6	14.3	9.1
85°	13.9	13.9	12.8	8.3	5.0
87.5°	4.9	4.9	4.5	2.7	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)