

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: P521073

Luminaire Tested: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521073  
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-050U-125D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 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: 5739.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 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: General Diffuse

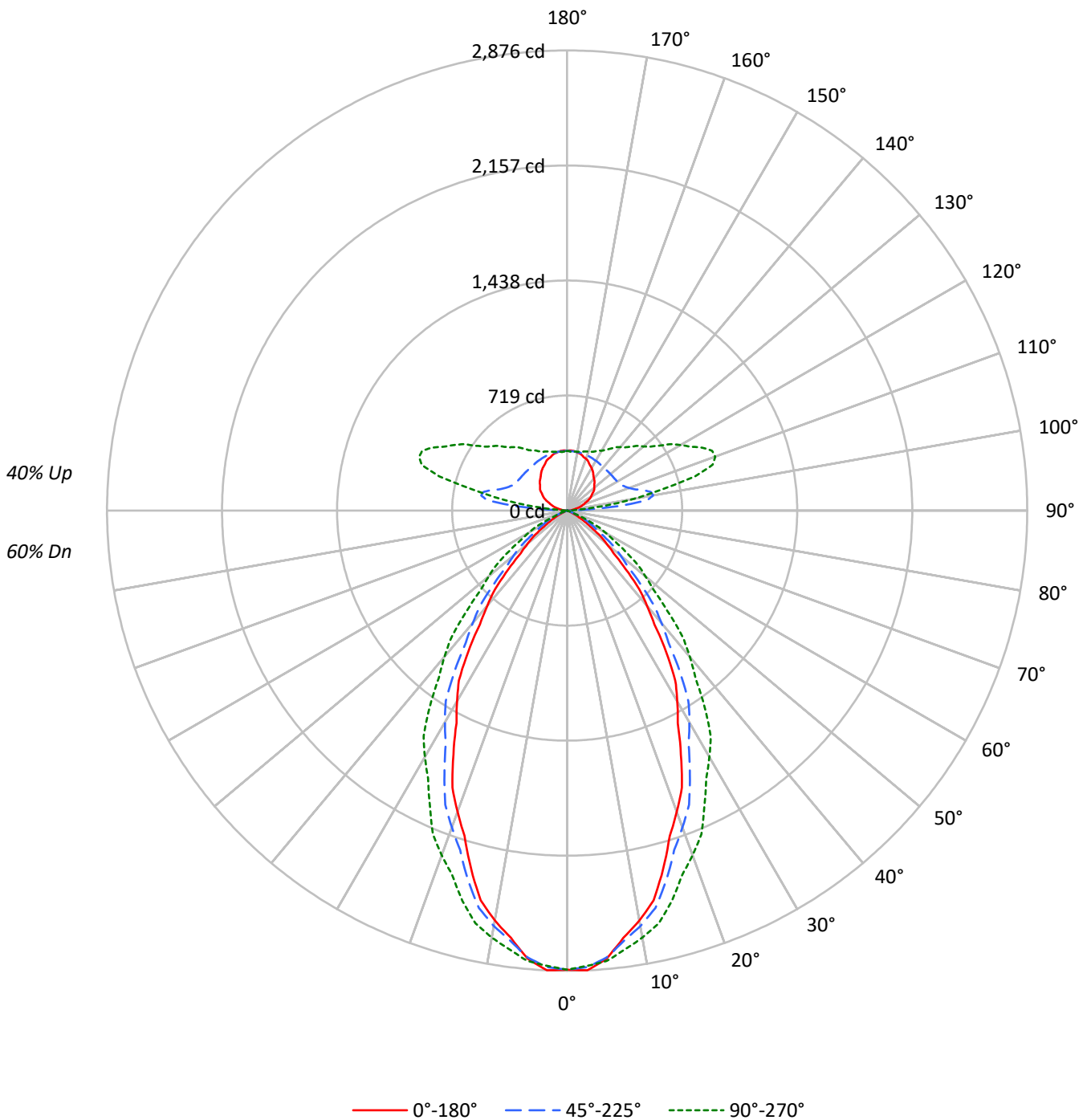
Input Watts (W): 71.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20									20									20									20									
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60																			
1	102	99	95	92	95	92	90	87	81	79	77	70	69	68	61	60	59	54																			
2	95	89	84	79	89	83	79	75	74	70	68	65	62	60	56	55	53	49																			
3	88	80	74	69	82	75	70	66	67	63	60	59	56	54	52	50	48	44																			
4	82	72	66	60	77	68	62	58	61	56	53	54	51	48	48	45	43	40																			
5	76	66	59	53	71	62	56	51	56	51	47	50	46	43	44	42	39	37																			
6	71	60	53	48	66	57	51	46	51	46	43	46	42	39	41	38	36	33																			
7	66	55	48	43	62	52	46	42	47	42	39	43	39	36	38	35	33	31																			
8	62	51	44	39	58	48	42	38	44	39	35	40	36	33	36	33	30	28																			
9	58	47	40	36	55	45	39	34	41	36	32	37	33	30	33	30	28	26																			
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	31	28	26	24																			

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

	0°	45°	90°
0°	26474	26474	26474
5°	26048	25983	26176
10°	24372	24697	25386
15°	22157	22859	24132
20°	19668	20690	22503
25°	17128	18484	20675
30°	14671	16283	18945
35°	12164	13822	16855
40°	9346	11052	14362
45°	6756	8368	11556
50°	4603	6237	9166
55°	2992	4510	7123
60°	1716	3176	5148
65°	454	1939	2607
70°	224	599	750
75°	100	50	0
80°	74	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11556 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.9	4.6
10°-20°	669.7	11.7
20°-30°	838.4	14.6
30°-40°	774.4	13.5
40°-50°	520.3	9.1
50°-60°	268.8	4.7
60°-70°	84.2	1.5
70°-80°	5.3	0.1
80°-90°	0.1	0.0
90°-100°	169.9	3.0
100°-110°	483.4	8.4
110°-120°	463.2	8.1
120°-130°	366.6	6.4
130°-140°	294.2	5.1
140°-150°	230.4	4.0
150°-160°	168.5	2.9
160°-170°	104.4	1.8
170°-180°	35.4	0.6
0°-30°	1769.9	30.8
0°-40°	2544.3	44.3
0°-60°	3333.3	58.1
0°-90°	3422.9	59.6
90°-120°	1116.5	19.5
90°-150°	2007.7	35.0
90°-180°	2316.0	40.4
0°-180°	5739.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2869	2869	2869	2869	2869	
5°	2812	2784	2806	2816	2826	261
15°	2320	2312	2393	2474	2526	646
25°	1682	1696	1816	1940	2031	771
35°	1080	1107	1227	1372	1496	669
45°	518	549	641	766	886	407
55°	186	217	280	360	443	174
65°	21	40	89	107	119	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
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°	2869.4	2869.4	2869.4	2869.4	2869.4
2.5°	2876.0	2848.9	2856.1	2855.9	2848.3
5°	2812.5	2784.0	2805.5	2815.5	2826.3
7.5°	2693.6	2671.4	2712.8	2743.8	2766.4
10°	2601.5	2582.5	2636.2	2678.5	2709.7
12.5°	2494.8	2480.2	2545.1	2603.2	2643.1
15°	2319.7	2311.5	2393.2	2473.6	2526.5
17.5°	2132.0	2131.7	2225.0	2324.7	2388.5
20°	2003.2	2007.2	2107.3	2217.2	2291.9
22.5°	1874.3	1883.8	1990.7	2105.3	2190.8
25°	1682.5	1696.1	1815.7	1940.0	2030.9
27.5°	1498.1	1517.9	1643.9	1773.0	1883.8
30°	1377.1	1400.2	1528.4	1664.2	1778.3
32.5°	1258.3	1285.7	1410.7	1554.4	1670.5
35°	1080.0	1107.2	1227.2	1371.6	1496.5
37.5°	895.9	922.5	1039.8	1181.9	1316.8
40°	776.0	805.9	917.6	1055.4	1192.5
42.5°	667.2	697.0	802.1	937.5	1067.0
45°	517.8	549.0	641.3	766.2	885.7
47.5°	394.0	427.9	508.9	621.9	730.7
50°	320.7	354.6	434.5	534.0	638.6
52.5°	261.8	294.7	366.8	460.6	556.4
55°	186.0	217.2	280.4	360.0	442.8
57.5°	128.5	155.4	212.1	278.6	343.4
60°	93.0	118.8	172.1	226.1	279.0
62.5°	61.9	85.5	137.7	179.1	214.6
65°	20.8	39.8	88.8	107.2	119.4
67.5°	10.6	12.7	46.6	49.2	53.3
70°	8.3	8.3	22.2	23.7	27.8
72.5°	6.1	6.1	8.9	11.4	12.2
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	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°	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)