

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: P520979

Luminaire Tested: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520979  
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-025U-050D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 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: 3290.0 lumens  
Efficiency: N/A  
Efficacy: 94.8 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

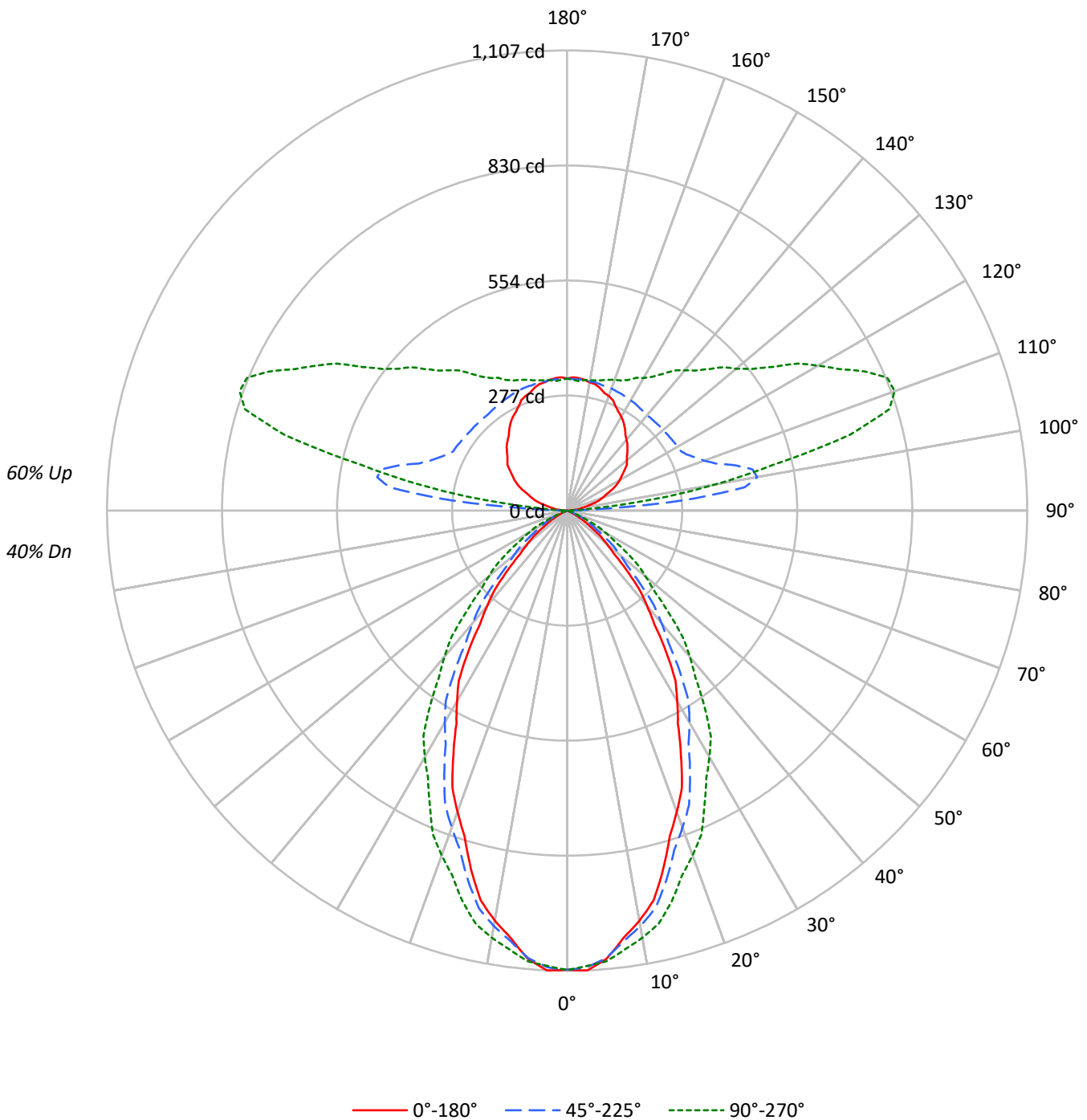
Input Watts (W): 34.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40																			
1	97	93	90	87	88	85	83	80	70	68	67	56	55	54	44	43	42	37																			
2	89	83	78	73	82	76	72	68	63	60	58	51	49	48	40	39	38	33																			
3	83	74	68	63	75	68	63	59	57	53	50	47	44	42	37	35	34	30																			
4	76	67	60	55	70	62	56	51	52	48	44	43	40	37	34	32	31	27																			
5	71	60	53	48	65	56	50	45	47	43	39	39	36	33	32	29	28	25																			
6	66	55	47	42	60	51	44	40	43	38	35	36	33	30	29	27	25	22																			
7	61	50	43	38	56	46	40	36	40	35	31	33	30	27	27	25	23	21																			
8	57	46	39	34	52	42	36	32	36	32	28	31	27	25	25	23	21	19																			
9	53	42	35	31	49	39	33	29	34	29	26	29	25	23	24	21	20	17																			
10	50	39	32	28	46	36	30	26	31	27	24	27	23	21	22	20	18	16																			

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

	0°	45°	90°
0°	10193	10193	10193
5°	10029	10004	10078
10°	9384	9509	9774
15°	8531	8801	9291
20°	7573	7966	8664
25°	6595	7117	7960
30°	5648	6270	7294
35°	4683	5322	6490
40°	3599	4255	5529
45°	2602	3222	4449
50°	1773	2401	3530
55°	1152	1737	2743
60°	661	1223	1982
65°	175	747	1004
70°	86	232	289
75°	39	18	0
80°	27	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4449 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.8	3.1
10°-20°	257.8	7.8
20°-30°	322.8	9.8
30°-40°	298.2	9.1
40°-50°	200.3	6.1
50°-60°	103.5	3.1
60°-70°	32.4	1.0
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	144.7	4.4
100°-110°	411.6	12.5
110°-120°	394.4	12.0
120°-130°	312.1	9.5
130°-140°	250.5	7.6
140°-150°	196.1	6.0
150°-160°	143.5	4.4
160°-170°	88.9	2.7
170°-180°	30.2	0.9
0°-30°	681.4	20.7
0°-40°	979.6	29.8
0°-60°	1283.4	39.0
0°-90°	1317.9	40.1
90°-120°	950.7	28.9
90°-150°	1709.6	52.0
90°-180°	1972.0	59.9
0°-180°	3290.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1083	1072	1080	1084	1088	100
15°	893	890	921	952	973	249
25°	648	653	699	747	782	297
35°	416	426	472	528	576	258
45°	199	211	247	295	341	157
55°	72	84	108	139	170	67
65°	8	15	34	41	46	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	62	280	97	60	18
105°	64	97	420	741	704	68
115°	119	144	318	674	791	117
125°	168	186	304	504	602	150
135°	205	222	300	426	481	158
145°	242	254	302	368	401	151
155°	276	283	310	333	346	128
165°	305	307	313	320	325	86
175°	320	318	317	315	313	30
180°	318	318	318	318	318	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.8	1104.8	1104.8	1104.8	1104.8
2.5°	1107.3	1096.9	1099.6	1099.6	1096.6
5°	1082.9	1071.9	1080.2	1084.0	1088.2
7.5°	1037.1	1028.5	1044.5	1056.4	1065.1
10°	1001.6	994.3	1015.0	1031.3	1043.3
12.5°	960.6	954.9	979.9	1002.3	1017.6
15°	893.1	890.0	921.4	952.4	972.7
17.5°	820.9	820.7	856.7	895.1	919.6
20°	771.3	772.8	811.3	853.7	882.4
22.5°	721.7	725.3	766.4	810.6	843.5
25°	647.8	653.0	699.1	746.9	781.9
27.5°	576.8	584.4	632.9	682.6	725.3
30°	530.2	539.1	588.5	640.8	684.7
32.5°	484.5	495.0	543.1	598.5	643.2
35°	415.8	426.3	472.5	528.1	576.2
37.5°	345.0	355.2	400.3	455.1	507.0
40°	298.8	310.3	353.3	406.3	459.1
42.5°	256.9	268.4	308.8	360.9	410.8
45°	199.4	211.4	246.9	295.0	341.0
47.5°	151.7	164.7	195.9	239.4	281.3
50°	123.5	136.5	167.3	205.6	245.9
52.5°	100.8	113.4	141.2	177.3	214.2
55°	71.6	83.6	108.0	138.6	170.5
57.5°	49.5	59.8	81.7	107.2	132.2
60°	35.8	45.7	66.3	87.0	107.4
62.5°	23.8	32.9	53.0	68.9	82.6
65°	8.0	15.3	34.2	41.3	46.0
67.5°	4.1	4.9	18.0	19.0	20.5
70°	3.2	3.2	8.6	9.1	10.7
72.5°	2.4	2.4	3.4	4.4	4.7
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°	4.8	25.6	59.4	17.3	13.0
95°	15.7	62.3	280.1	96.9	59.8
97.5°	28.9	73.0	431.3	308.6	211.5
100°	38.0	79.3	464.2	470.2	362.2
102.5°	48.2	86.2	456.9	601.8	507.5
105°	64.0	97.0	419.5	741.0	704.4
107.5°	80.0	109.7	375.8	780.2	812.8
110°	91.1	118.9	350.7	765.2	838.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	101.8	128.1	333.8	729.7	834.1
115°	118.9	143.7	318.1	673.9	791.3
117.5°	134.0	157.3	308.8	612.8	737.2
120°	146.1	165.5	307.8	577.9	697.2
122.5°	155.7	175.2	305.4	547.3	658.0
125°	167.8	186.1	303.6	503.8	602.4
127.5°	181.0	198.1	302.6	477.8	559.1
130°	187.7	204.8	301.2	459.7	530.6
132.5°	195.0	211.6	301.2	445.6	510.8
135°	205.2	222.3	300.0	425.6	481.1
137.5°	214.9	231.5	299.9	408.6	456.6
140°	222.1	239.2	299.4	394.6	440.6
142.5°	230.3	244.6	300.8	383.4	424.7
145°	242.0	254.4	302.4	368.3	401.4
147.5°	252.1	264.1	305.1	353.2	381.7
150°	260.8	269.0	306.0	348.1	368.2
152.5°	267.5	276.2	307.0	341.3	360.0
155°	276.4	282.9	309.6	332.9	346.5
157.5°	287.6	291.4	310.2	329.1	338.7
160°	293.3	296.3	312.7	326.1	334.4
162.5°	296.7	300.2	313.1	323.7	330.0
165°	305.4	306.6	313.3	320.0	324.7
167.5°	311.3	310.3	316.0	319.1	321.0
170°	313.3	312.7	315.1	315.7	318.1
172.5°	317.6	315.6	316.5	314.8	316.6
175°	319.9	318.1	316.9	315.0	312.7
177.5°	320.9	318.0	316.5	314.6	315.1
180°	317.5	317.5	317.5	317.5	317.5

(END OF REPORT)