

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: P521007

Luminaire Tested: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521007  
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-100D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 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: 4691.8 lumens  
Efficiency: N/A  
Efficacy: 83.3 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: General Diffuse

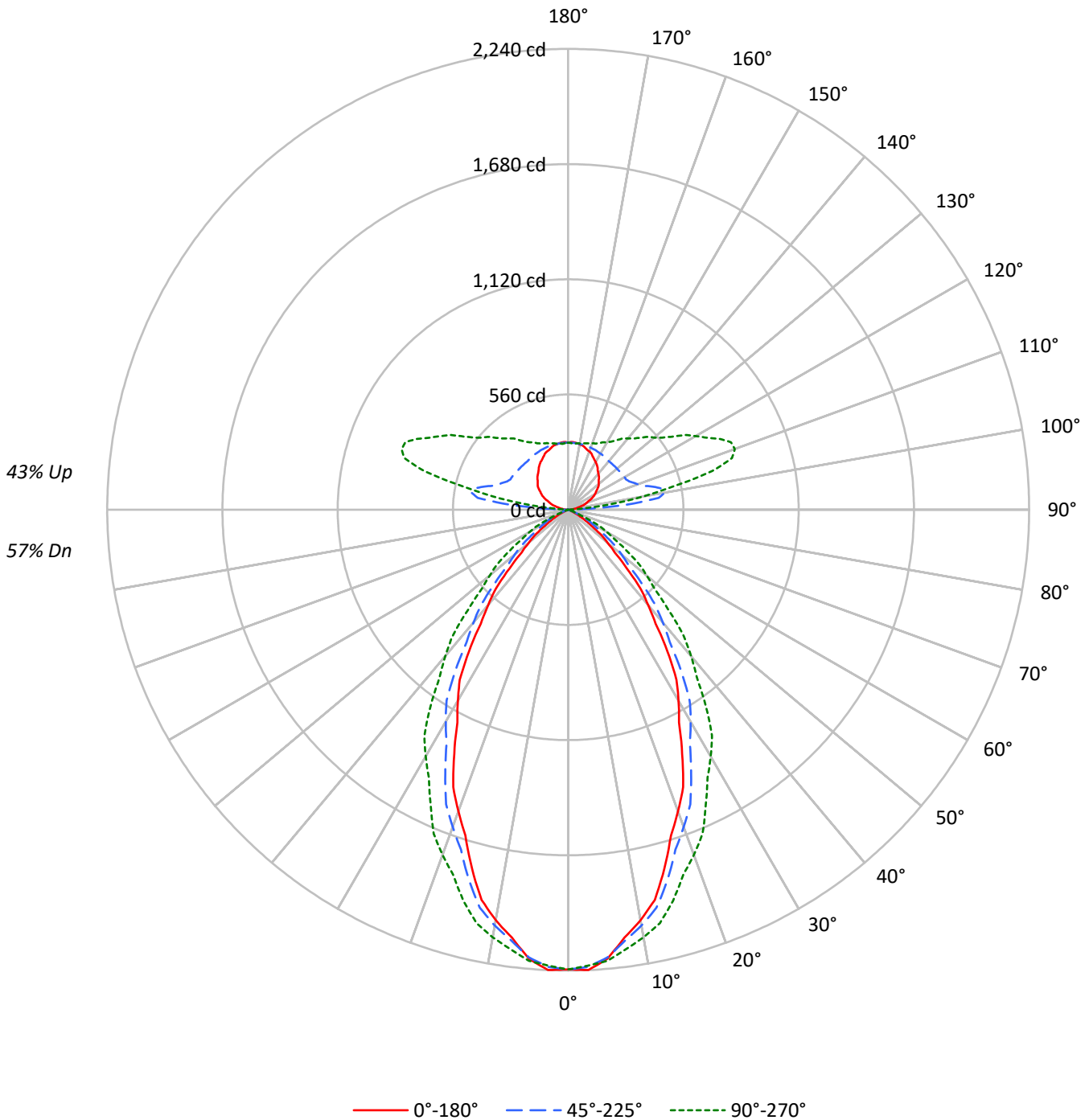
Input Watts (W): 56.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	101	101	101	101	87	87	87	74	74	74	62	62	62	57																			
1	101	98	95	92	94	91	89	86	79	77	76	68	67	66	58	57	57	52																			
2	94	88	83	78	88	82	78	74	72	69	66	63	60	58	54	52	51	47																			
3	87	79	73	68	81	74	69	65	66	61	58	57	54	52	50	48	46	42																			
4	81	72	65	60	76	67	61	57	60	55	52	53	49	46	46	43	41	38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	43	40	38	35																			
6	70	59	52	47	66	56	50	45	50	45	41	45	41	38	39	37	34	32																			
7	65	54	47	42	61	52	45	41	46	41	38	41	37	34	37	34	31	29																			
8	61	50	43	38	57	48	41	37	43	38	34	38	34	32	34	31	29	27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																			
10	54	43	36	32	51	41	35	31	37	32	29	34	30	27	30	27	25	23																			

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

	0°	45°	90°
0°	20616	20616	20616
5°	20284	20234	20384
10°	18980	19233	19769
15°	17254	17801	18793
20°	15317	16112	17524
25°	13338	14395	16101
30°	11425	12680	14753
35°	9473	10763	13126
40°	7278	8607	11184
45°	5261	6516	8999
50°	3584	4857	7138
55°	2331	3513	5548
60°	1336	2474	4010
65°	354	1511	2030
70°	175	467	583
75°	78	39	0
80°	58	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8999 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.9	4.3
10°-20°	521.5	11.1
20°-30°	652.9	13.9
30°-40°	603.0	12.9
40°-50°	405.2	8.6
50°-60°	209.3	4.5
60°-70°	65.5	1.4
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	148.6	3.2
100°-110°	422.9	9.0
110°-120°	405.2	8.6
120°-130°	320.7	6.8
130°-140°	257.4	5.5
140°-150°	201.5	4.3
150°-160°	147.4	3.1
160°-170°	91.3	1.9
170°-180°	31.0	0.7
0°-30°	1378.3	29.4
0°-40°	1981.3	42.2
0°-60°	2595.8	55.3
0°-90°	2665.6	56.8
90°-120°	976.8	20.8
90°-150°	1756.4	37.4
90°-180°	2026.0	43.2
0°-180°	4691.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2234	2234	2234	2234	2234	
5°	2190	2168	2185	2193	2201	203
15°	1806	1800	1864	1926	1968	503
25°	1310	1321	1414	1511	1582	601
35°	841	862	956	1068	1165	521
45°	403	428	499	597	690	317
55°	145	169	218	280	345	135
65°	16	31	69	84	93	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

TEST NUMBER: P521007

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2234.5	2234.5	2234.5	2234.5	2234.5
2.5°	2239.7	2218.6	2224.2	2224.0	2218.1
5°	2190.2	2168.0	2184.8	2192.6	2201.0
7.5°	2097.7	2080.3	2112.6	2136.8	2154.3
10°	2025.9	2011.1	2052.9	2085.9	2110.2
12.5°	1942.9	1931.4	1982.0	2027.2	2058.3
15°	1806.4	1800.1	1863.7	1926.3	1967.5
17.5°	1660.3	1660.1	1732.7	1810.4	1860.1
20°	1560.0	1563.1	1641.0	1726.7	1784.8
22.5°	1459.6	1467.0	1550.2	1639.5	1706.1
25°	1310.2	1320.8	1414.0	1510.8	1581.6
27.5°	1166.7	1182.1	1280.2	1380.7	1467.0
30°	1072.4	1090.4	1190.2	1296.0	1384.8
32.5°	979.9	1001.2	1098.6	1210.5	1300.9
35°	841.1	862.2	955.6	1068.1	1165.4
37.5°	697.7	718.4	809.7	920.4	1025.5
40°	604.3	627.6	714.6	821.9	928.6
42.5°	519.6	542.8	624.6	730.1	830.9
45°	403.2	427.5	499.4	596.7	689.7
47.5°	306.8	333.2	396.3	484.3	569.1
50°	249.7	276.1	338.4	415.9	497.3
52.5°	203.9	229.5	285.6	358.7	433.3
55°	144.9	169.2	218.4	280.4	344.9
57.5°	100.1	121.0	165.2	216.9	267.5
60°	72.4	92.5	134.1	176.1	217.3
62.5°	48.2	66.6	107.2	139.4	167.1
65°	16.2	31.0	69.2	83.5	93.0
67.5°	8.2	9.9	36.3	38.3	41.5
70°	6.5	6.5	17.3	18.4	21.6
72.5°	4.8	4.8	6.9	8.9	9.5
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	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°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)