

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: P521015

Luminaire Tested: SQ4-BB-025U-125D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521015  
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-125D-92765-1D-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4939.3 lumens  
Efficiency: N/A  
Efficacy: 71.0 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: Semi-Direct

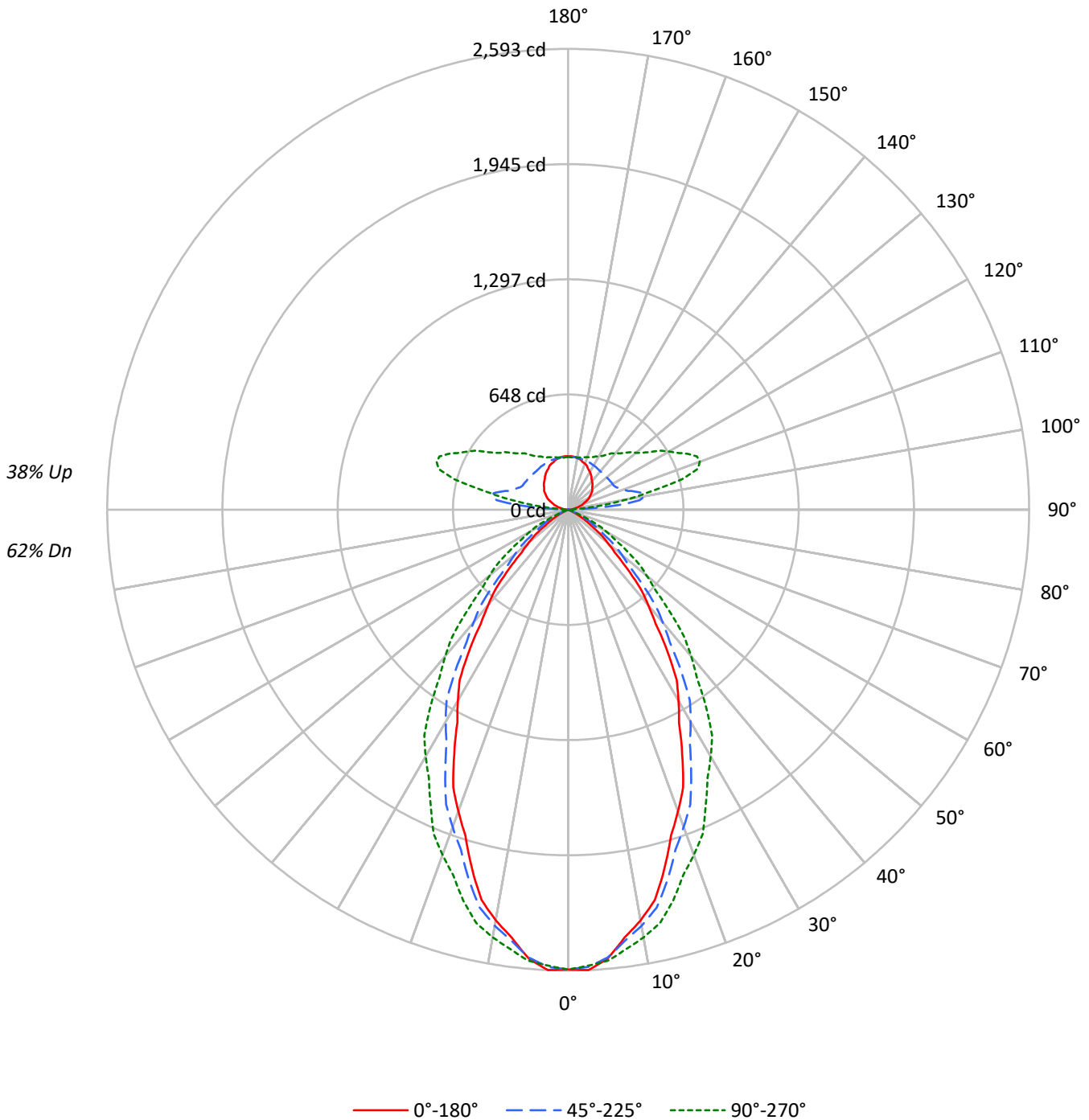
Input Watts (W): 69.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30
RCR																			
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	62	62
1	103	99	96	93	96	93	91	88	82	81	79	72	71	70	63	62	61	57	57
2	96	89	84	80	90	84	80	76	75	72	69	66	64	62	58	57	55	52	52
3	89	81	75	70	83	76	71	67	68	64	61	61	58	55	54	52	50	47	47
4	82	73	66	61	78	69	63	59	62	58	54	56	52	50	50	47	45	42	42
5	77	67	60	54	72	63	57	52	57	52	48	52	48	45	46	43	41	38	38
6	72	61	54	49	67	58	52	47	53	48	44	48	44	40	43	40	37	35	35
7	67	56	49	44	63	53	47	42	49	43	40	44	40	37	40	37	34	32	32
8	63	52	45	40	59	49	43	39	45	40	36	41	37	34	37	34	32	29	29
9	59	48	41	36	56	46	39	35	42	37	33	38	34	31	35	32	29	27	27
10	55	44	38	33	52	43	36	32	39	34	31	36	32	29	33	29	27	25	25

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

	0°	45°	90°
0°	23870	23870	23870
5°	23486	23429	23602
10°	21976	22269	22890
15°	19978	20612	21760
20°	17734	18656	20290
25°	15443	16667	18642
30°	13228	14682	17082
35°	10968	12463	15197
40°	8427	9965	12950
45°	6092	7546	10420
50°	4150	5624	8265
55°	2698	4066	6423
60°	1548	2864	4643
65°	410	1749	2349
70°	202	540	674
75°	89	46	0
80°	69	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10420 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.1	4.8
10°-20°	603.8	12.2
20°-30°	755.9	15.3
30°-40°	698.2	14.1
40°-50°	469.2	9.5
50°-60°	242.3	4.9
60°-70°	75.9	1.5
70°-80°	4.8	0.1
80°-90°	0.1	0.0
90°-100°	135.9	2.8
100°-110°	386.8	7.8
110°-120°	370.6	7.5
120°-130°	293.3	5.9
130°-140°	235.4	4.8
140°-150°	184.3	3.7
150°-160°	134.8	2.7
160°-170°	83.5	1.7
170°-180°	28.3	0.6
0°-30°	1595.8	32.3
0°-40°	2294.1	46.4
0°-60°	3005.6	60.9
0°-90°	3086.4	62.5
90°-120°	893.2	18.1
90°-150°	1606.2	32.5
90°-180°	1853.0	37.5
0°-180°	4939.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2587	2587	2587	2587	2587	
5°	2536	2510	2530	2539	2548	235
15°	2092	2084	2158	2230	2278	583
25°	1517	1529	1637	1749	1831	695
35°	974	998	1106	1237	1349	603
45°	467	495	578	691	799	367
55°	168	196	253	325	399	157
65°	19	36	80	97	108	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	59	263	91	56	17
105°	60	91	394	696	662	64
115°	112	135	299	633	744	110
125°	158	175	285	473	566	141
135°	193	209	282	400	452	149
145°	227	239	284	346	377	142
155°	260	266	291	313	326	120
165°	287	288	294	301	305	81
175°	301	299	298	296	294	28
180°	298	298	298	298	298	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2587.2	2587.2	2587.2	2587.2	2587.2
2.5°	2593.2	2568.8	2575.2	2575.1	2568.2
5°	2535.9	2510.2	2529.7	2538.6	2548.4
7.5°	2428.8	2408.7	2446.0	2474.0	2494.4
10°	2345.7	2328.5	2377.0	2415.1	2443.3
12.5°	2249.5	2236.3	2294.8	2347.2	2383.2
15°	2091.6	2084.2	2157.9	2230.3	2278.1
17.5°	1922.3	1922.1	2006.2	2096.1	2153.7
20°	1806.2	1809.9	1900.1	1999.2	2066.5
22.5°	1690.0	1698.6	1794.9	1898.3	1975.4
25°	1517.0	1529.3	1637.2	1749.2	1831.2
27.5°	1350.8	1368.7	1482.2	1598.7	1698.5
30°	1241.7	1262.5	1378.1	1500.6	1603.4
32.5°	1134.5	1159.3	1272.0	1401.5	1506.3
35°	973.8	998.3	1106.5	1236.7	1349.3
37.5°	807.8	831.8	937.5	1065.7	1187.3
40°	699.7	726.6	827.4	951.6	1075.2
42.5°	601.6	628.5	723.2	845.3	962.0
45°	466.9	495.0	578.3	690.9	798.6
47.5°	355.2	385.8	458.9	560.7	658.9
50°	289.1	319.7	391.8	481.5	575.8
52.5°	236.1	265.7	330.7	415.3	501.7
55°	167.7	195.9	252.8	324.6	399.3
57.5°	115.9	140.1	191.3	251.2	309.7
60°	83.9	107.1	155.2	203.9	251.6
62.5°	55.8	77.1	124.2	161.4	193.5
65°	18.8	35.9	80.1	96.6	107.6
67.5°	9.5	11.5	42.1	44.4	48.1
70°	7.5	7.5	20.0	21.4	25.0
72.5°	5.5	5.5	8.0	10.3	11.0
75°	2.5	2.5	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	4.5	24.1	55.8	16.2	12.2
95°	14.7	58.6	263.1	91.1	56.1
97.5°	27.1	68.6	405.3	290.0	198.7
100°	35.7	74.5	436.1	441.7	340.3
102.5°	45.3	81.0	429.3	565.4	476.8
105°	60.1	91.2	394.1	696.2	661.8
107.5°	75.2	103.0	353.1	733.1	763.7
110°	85.6	111.7	329.5	719.0	787.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	95.6	120.3	313.6	685.6	783.6
115°	111.7	135.0	298.9	633.1	743.5
117.5°	125.9	147.7	290.1	575.8	692.7
120°	137.2	155.5	289.2	543.0	655.0
122.5°	146.3	164.6	287.0	514.2	618.3
125°	157.7	174.8	285.3	473.4	566.0
127.5°	170.0	186.1	284.3	449.0	525.3
130°	176.4	192.5	283.0	431.9	498.5
132.5°	183.2	198.8	283.0	418.7	479.9
135°	192.8	208.9	281.9	399.9	452.0
137.5°	201.9	217.5	281.7	383.9	429.0
140°	208.7	224.8	281.3	370.7	414.0
142.5°	216.4	229.8	282.6	360.2	399.0
145°	227.4	239.1	284.1	346.1	377.1
147.5°	236.8	248.1	286.6	331.8	358.6
150°	245.0	252.8	287.5	327.1	345.9
152.5°	251.3	259.6	288.4	320.7	338.2
155°	259.7	265.8	290.9	312.8	325.5
157.5°	270.2	273.8	291.5	309.2	318.3
160°	275.6	278.4	293.8	306.4	314.2
162.5°	278.8	282.0	294.2	304.1	310.1
165°	287.0	288.1	294.3	300.7	305.1
167.5°	292.5	291.5	296.9	299.8	301.6
170°	294.3	293.8	296.0	296.6	298.9
172.5°	298.4	296.5	297.4	295.7	297.5
175°	300.6	298.9	297.7	296.0	293.8
177.5°	301.5	298.8	297.4	295.6	296.0
180°	298.3	298.3	298.3	298.3	298.3

(END OF REPORT)