

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: P520991

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520991  
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-075D-92765-1D-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3875.0 lumens  
Efficiency: N/A  
Efficacy: 84.4 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

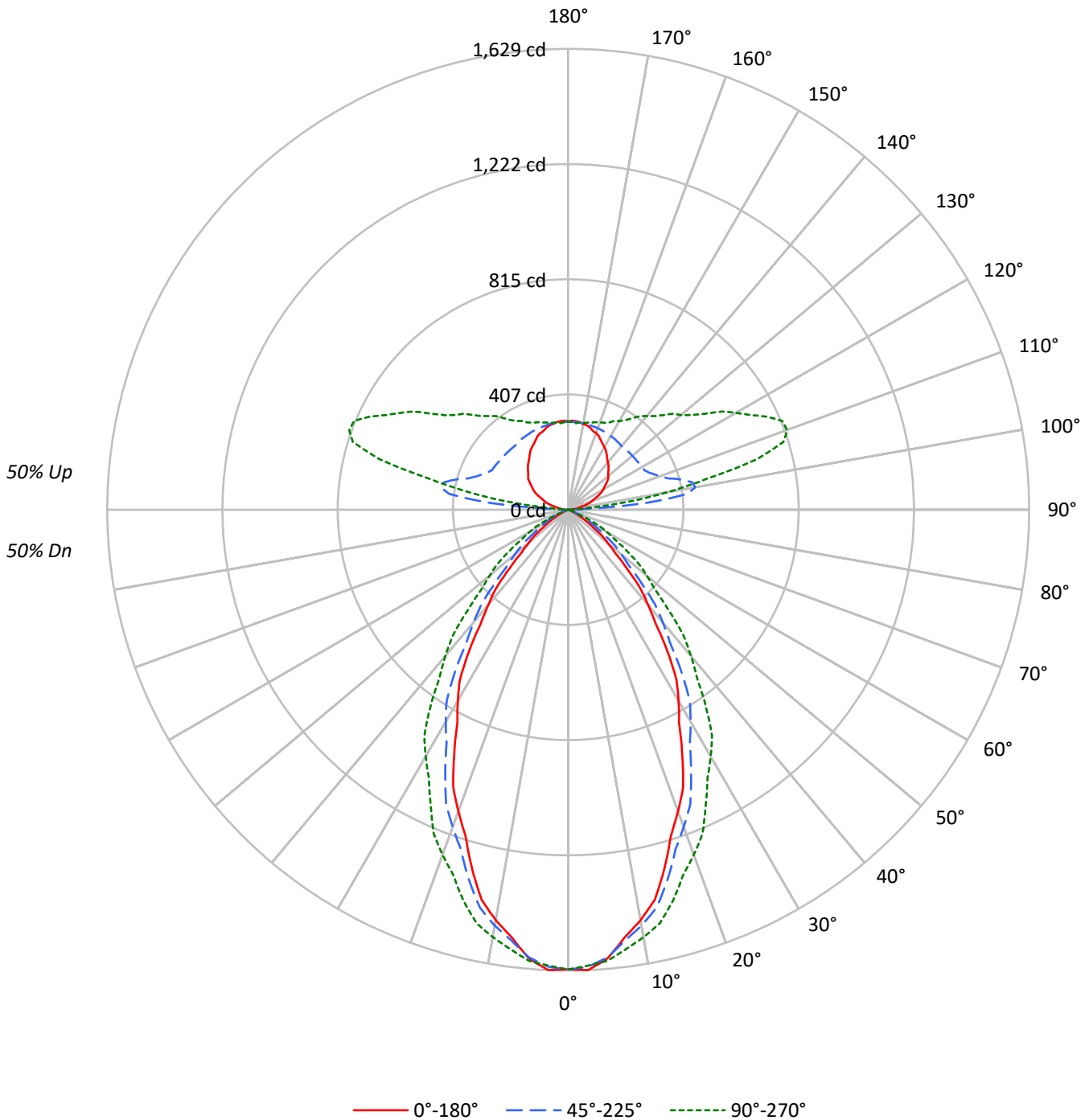
Input Watts (W): 45.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	100	96	93	90	92	89	86	84	76	74	72	64	62	61	52	52	51	46				
2	92	86	81	76	85	80	75	72	69	65	63	58	56	54	48	47	46	41				
3	85	77	71	66	79	72	67	62	62	58	55	53	50	48	45	43	41	37				
4	79	70	63	58	73	65	59	55	57	52	49	49	45	43	41	39	37	34				
5	73	63	56	51	68	59	53	48	52	47	43	45	41	38	38	36	34	31				
6	68	57	50	45	63	54	48	43	47	42	39	41	37	35	35	33	31	28				
7	64	53	45	40	59	49	43	39	44	39	35	38	34	32	33	30	28	26				
8	59	48	41	36	55	46	39	35	40	35	32	35	32	29	31	28	26	24				
9	56	45	38	33	52	42	36	32	37	32	29	33	29	26	29	26	24	22				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	24	27	24	22	20				

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

	0°	45°	90°
0°	14991	14991	14991
5°	14750	14713	14822
10°	13801	13984	14375
15°	12546	12944	13665
20°	11137	11716	12742
25°	9698	10467	11707
30°	8308	9221	10728
35°	6889	7827	9544
40°	5292	6258	8132
45°	3826	4739	6543
50°	2607	3531	5190
55°	1694	2554	4034
60°	972	1799	2915
65°	258	1098	1476
70°	127	340	424
75°	57	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6543 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.3	3.8
10°-20°	379.2	9.8
20°-30°	474.7	12.3
30°-40°	438.5	11.3
40°-50°	294.6	7.6
50°-60°	152.2	3.9
60°-70°	47.7	1.2
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	142.1	3.7
100°-110°	404.2	10.4
110°-120°	387.3	10.0
120°-130°	306.6	7.9
130°-140°	246.0	6.3
140°-150°	192.6	5.0
150°-160°	140.9	3.6
160°-170°	87.3	2.3
170°-180°	29.6	0.8
0°-30°	1002.2	25.9
0°-40°	1440.7	37.2
0°-60°	1887.5	48.7
0°-90°	1938.3	50.0
90°-120°	933.6	24.1
90°-150°	1678.9	43.3
90°-180°	1937.0	50.0
0°-180°	3875.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1625	1625	1625	1625	1625	
5°	1593	1576	1589	1594	1600	148
15°	1314	1309	1355	1401	1431	366
25°	953	960	1028	1098	1150	437
35°	612	627	695	777	847	379
45°	293	311	363	434	502	230
55°	105	123	159	204	251	98
65°	12	23	50	61	68	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	61	275	95	59	18
105°	63	95	412	728	692	66
115°	117	141	312	662	777	115
125°	165	183	298	495	592	147
135°	202	218	295	418	472	156
145°	238	250	297	362	394	148
155°	272	278	304	327	340	126
165°	300	301	308	314	319	84
175°	314	312	311	309	307	30
180°	312	312	312	312	312	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1624.8	1624.8	1624.8	1624.8	1624.8
2.5°	1628.6	1613.2	1617.3	1617.2	1612.9
5°	1592.6	1576.4	1588.6	1594.3	1600.4
7.5°	1525.3	1512.7	1536.1	1553.7	1566.5
10°	1473.1	1462.3	1492.7	1516.7	1534.4
12.5°	1412.7	1404.4	1441.2	1474.1	1496.7
15°	1313.5	1308.9	1355.2	1400.7	1430.6
17.5°	1207.2	1207.1	1259.9	1316.4	1352.5
20°	1134.3	1136.6	1193.3	1255.5	1297.8
22.5°	1061.4	1066.7	1127.2	1192.2	1240.6
25°	952.7	960.4	1028.2	1098.5	1150.0
27.5°	848.3	859.5	930.9	1004.0	1066.7
30°	779.8	792.8	865.5	942.4	1007.0
32.5°	712.5	728.0	798.8	880.2	946.0
35°	611.6	626.9	694.9	776.7	847.4
37.5°	507.3	522.4	588.8	669.3	745.7
40°	439.4	456.3	519.6	597.6	675.2
42.5°	377.8	394.7	454.2	530.8	604.2
45°	293.2	310.9	363.2	433.9	501.5
47.5°	223.1	242.3	288.2	352.1	413.8
50°	181.6	200.8	246.0	302.4	361.6
52.5°	148.3	166.9	207.7	260.8	315.1
55°	105.3	123.0	158.8	203.9	250.8
57.5°	72.8	88.0	120.1	157.7	194.5
60°	52.7	67.3	97.5	128.0	158.0
62.5°	35.1	48.4	78.0	101.4	121.5
65°	11.8	22.6	50.3	60.7	67.6
67.5°	6.0	7.2	26.4	27.9	30.2
70°	4.7	4.7	12.6	13.4	15.7
72.5°	3.5	3.5	5.0	6.5	6.9
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	4.7	25.1	58.3	17.0	12.8
95°	15.4	61.2	275.0	95.2	58.7
97.5°	28.3	71.7	423.6	303.1	207.7
100°	37.3	77.9	455.8	461.7	355.7
102.5°	47.3	84.6	448.7	591.0	498.4
105°	62.8	95.3	412.0	727.7	691.7
107.5°	78.6	107.7	369.0	766.2	798.2
110°	89.5	116.7	344.4	751.5	823.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	99.9	125.8	327.8	716.6	819.1
115°	116.8	141.1	312.4	661.8	777.1
117.5°	131.6	154.4	303.3	601.8	724.0
120°	143.4	162.6	302.3	567.6	684.6
122.5°	152.9	172.1	299.9	537.5	646.2
125°	164.8	182.8	298.2	494.8	591.6
127.5°	177.7	194.5	297.2	469.3	549.0
130°	184.3	201.2	295.8	451.5	521.0
132.5°	191.5	207.8	295.8	437.6	501.6
135°	201.5	218.3	294.6	417.9	472.4
137.5°	211.0	227.4	294.5	401.3	448.4
140°	218.1	234.9	294.0	387.5	432.7
142.5°	226.2	240.2	295.4	376.5	417.1
145°	237.7	249.9	297.0	361.7	394.2
147.5°	247.5	259.4	299.6	346.8	374.9
150°	256.1	264.2	300.5	341.9	361.6
152.5°	262.7	271.3	301.5	335.2	353.5
155°	271.5	277.9	304.1	326.9	340.2
157.5°	282.4	286.2	304.7	323.1	332.7
160°	288.1	291.0	307.0	320.3	328.4
162.5°	291.4	294.8	307.5	317.9	324.1
165°	299.9	301.1	307.6	314.3	318.9
167.5°	305.7	304.7	310.4	313.4	315.2
170°	307.6	307.1	309.4	310.1	312.4
172.5°	311.9	309.9	310.8	309.1	311.0
175°	314.2	312.4	311.2	309.4	307.0
177.5°	315.1	312.3	310.8	309.0	309.4
180°	311.8	311.8	311.8	311.8	311.8

(END OF REPORT)