

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: P521120

Luminaire Tested: SQ4-BB-075U-125D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521120  
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-075U-125D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6341.1 lumens  
Efficiency: N/A  
Efficacy: 79.9 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

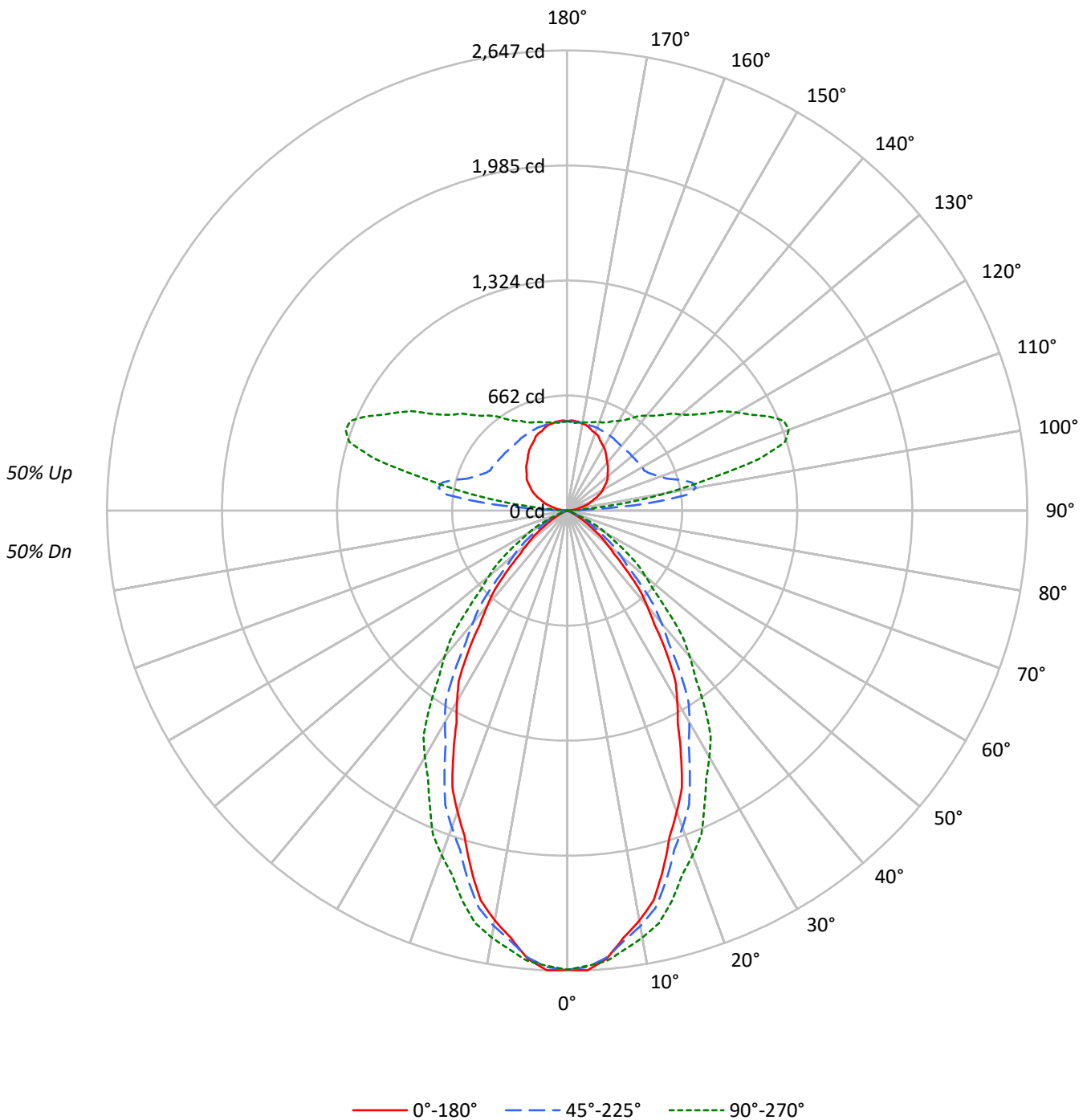
Input Watts (W): 79.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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									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	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	99	96	93	90	92	89	86	84	75	74	72	63	62	61	52	51	51	45																																				
2	92	86	81	76	85	80	75	72	68	65	62	58	56	54	48	47	45	41																																				
3	85	77	71	66	79	72	66	62	62	58	55	53	50	48	44	42	41	37																																				
4	79	70	63	57	73	65	59	54	56	52	48	48	45	43	41	39	37	33																																				
5	73	63	56	51	68	59	53	48	51	47	43	44	41	38	38	35	33	30																																				
6	68	57	50	45	63	54	47	43	47	42	39	41	37	35	35	33	30	28																																				
7	63	52	45	40	59	49	43	39	43	38	35	38	34	31	33	30	28	25																																				
8	59	48	41	36	55	45	39	35	40	35	32	35	31	29	30	28	26	23																																				
9	56	44	38	33	52	42	36	32	37	32	29	33	29	26	28	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°	24365	24365	24365
5°	23973	23914	24092
10°	22431	22730	23364
15°	20392	21039	22210
20°	18101	19042	20711
25°	15764	17012	19028
30°	13502	14986	17436
35°	11196	12721	15513
40°	8602	10171	13218
45°	6219	7702	10635
50°	4236	5740	8436
55°	2754	4152	6556
60°	1580	2923	4739
65°	419	1786	2399
70°	208	550	691
75°	93	46	0
80°	69	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10635 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.0	3.8
10°-20°	616.3	9.7
20°-30°	771.6	12.2
30°-40°	712.7	11.2
40°-50°	478.9	7.6
50°-60°	247.4	3.9
60°-70°	77.5	1.2
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	234.1	3.7
100°-110°	666.0	10.5
110°-120°	638.1	10.1
120°-130°	505.0	8.0
130°-140°	405.4	6.4
140°-150°	317.4	5.0
150°-160°	232.2	3.7
160°-170°	143.8	2.3
170°-180°	48.8	0.8
0°-30°	1628.9	25.7
0°-40°	2341.6	36.9
0°-60°	3067.9	48.4
0°-90°	3150.3	49.7
90°-120°	1538.2	24.3
90°-150°	2766.0	43.6
90°-180°	3191.0	50.3
0°-180°	6341.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2641	2641	2641	2641	2641	
5°	2588	2562	2582	2591	2601	240
15°	2135	2127	2203	2277	2325	595
25°	1548	1561	1671	1786	1869	710
35°	994	1019	1129	1262	1377	616
45°	477	505	590	705	815	374
55°	171	200	258	331	408	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	25	101	453	157	97	29
105°	104	157	679	1199	1140	110
115°	192	232	515	1090	1280	189
125°	272	301	491	815	975	243
135°	332	360	485	689	778	256
145°	392	412	489	596	649	245
155°	447	458	501	539	560	207
165°	494	496	507	518	525	139
175°	518	515	513	510	506	49
180°	514	514	514	514	514	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2640.9	2640.9	2640.9	2640.9	2640.9
2.5°	2647.0	2622.0	2628.6	2628.4	2621.4
5°	2588.5	2562.2	2582.1	2591.3	2601.3
7.5°	2479.1	2458.6	2496.7	2525.3	2546.1
10°	2394.3	2376.8	2426.2	2465.2	2493.9
12.5°	2296.2	2282.7	2342.4	2395.9	2432.6
15°	2134.9	2127.4	2202.6	2276.6	2325.3
17.5°	1962.2	1961.9	2047.8	2139.6	2198.3
20°	1843.6	1847.4	1939.4	2040.7	2109.4
22.5°	1725.1	1733.8	1832.1	1937.7	2016.4
25°	1548.5	1561.0	1671.1	1785.5	1869.2
27.5°	1378.8	1397.1	1513.0	1631.8	1733.7
30°	1267.4	1288.6	1406.7	1531.7	1636.6
32.5°	1158.0	1183.3	1298.3	1430.6	1537.5
35°	994.0	1019.0	1129.4	1262.4	1377.3
37.5°	824.6	849.1	956.9	1087.8	1212.0
40°	714.2	741.7	844.5	971.3	1097.5
42.5°	614.0	641.5	738.2	862.8	982.0
45°	476.6	505.3	590.3	705.2	815.1
47.5°	362.6	393.8	468.4	572.4	672.5
50°	295.1	326.4	399.9	491.5	587.7
52.5°	241.0	271.2	337.5	423.9	512.1
55°	171.2	199.9	258.1	331.4	407.6
57.5°	118.3	143.0	195.2	256.4	316.1
60°	85.6	109.3	158.4	208.1	256.8
62.5°	57.0	78.7	126.7	164.8	197.5
65°	19.2	36.7	81.8	98.6	109.9
67.5°	9.7	11.7	42.9	45.3	49.1
70°	7.7	7.7	20.4	21.8	25.6
72.5°	5.6	5.6	8.2	10.5	11.2
75°	2.6	2.6	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°	7.8	41.4	96.1	28.0	21.1
95°	25.4	100.8	453.1	156.8	96.7
97.5°	46.7	118.1	697.9	499.4	342.2
100°	61.5	128.4	751.0	760.7	585.9
102.5°	77.9	139.4	739.3	973.7	821.1
105°	103.5	157.0	678.7	1198.9	1139.7
107.5°	129.5	177.4	608.0	1262.3	1315.0
110°	147.5	192.3	567.4	1238.0	1356.5

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	164.6	207.2	540.0	1180.6	1349.4
115°	192.4	232.5	514.7	1090.3	1280.3
117.5°	216.8	254.4	499.6	991.5	1192.8
120°	236.3	267.8	498.0	935.1	1127.9
122.5°	252.0	283.5	494.1	885.5	1064.7
125°	271.5	301.1	491.2	815.2	974.6
127.5°	292.8	320.5	489.7	773.1	904.5
130°	303.7	331.4	487.3	743.8	858.4
132.5°	315.4	342.4	487.3	721.0	826.4
135°	332.0	359.7	485.4	688.6	778.3
137.5°	347.7	374.6	485.2	661.1	738.7
140°	359.4	387.1	484.4	638.4	712.9
142.5°	372.7	395.8	486.7	620.3	687.1
145°	391.6	411.7	489.3	595.9	649.4
147.5°	407.8	427.3	493.6	571.4	617.6
150°	421.9	435.2	495.1	563.2	595.7
152.5°	432.8	446.9	496.7	552.3	582.4
155°	447.3	457.8	501.0	538.6	560.5
157.5°	465.2	471.5	502.0	532.4	548.0
160°	474.6	479.4	505.9	527.6	541.0
162.5°	480.1	485.6	506.6	523.7	534.0
165°	494.1	496.1	506.8	517.8	525.4
167.5°	503.7	502.0	511.3	516.3	519.3
170°	506.8	505.9	509.8	510.8	514.7
172.5°	513.9	510.6	512.1	509.3	512.3
175°	517.6	514.7	512.7	509.7	505.9
177.5°	519.1	514.6	512.1	509.0	509.8
180°	513.7	513.7	513.7	513.7	513.7

(END OF REPORT)