

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: P521121

Luminaire Tested: SQ4-BB-075U-125D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521121  
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\_3500K  
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 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

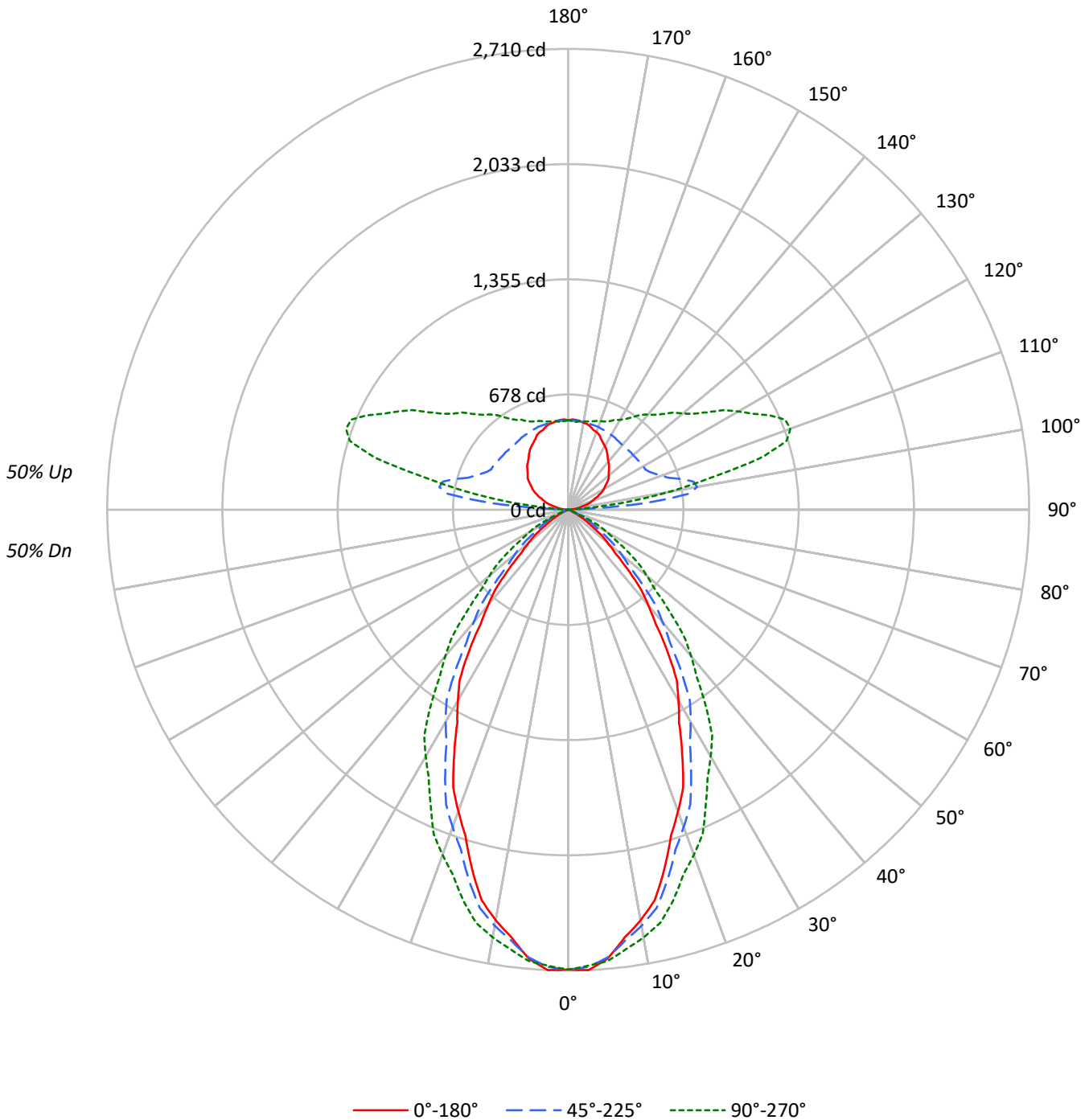
Lumens per Lamp: N/A  
Luminaire Lumens: 6493.2 lumens  
Efficiency: N/A  
Efficacy: 81.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 79.5  
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	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°	24949	24949	24949
5°	24548	24487	24670
10°	22969	23275	23925
15°	20881	21544	22743
20°	18536	19499	21208
25°	16141	17420	19484
30°	13826	15345	17854
35°	11464	13026	15884
40°	8808	10416	13535
45°	6367	7886	10891
50°	4338	5878	8638
55°	2820	4251	6712
60°	1618	2993	4853
65°	428	1827	2456
70°	210	564	707
75°	93	46	0
80°	69	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10891 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.8	3.8
10°-20°	631.1	9.7
20°-30°	790.1	12.2
30°-40°	729.8	11.2
40°-50°	490.4	7.6
50°-60°	253.3	3.9
60°-70°	79.3	1.2
70°-80°	5.0	0.1
80°-90°	0.1	0.0
90°-100°	239.7	3.7
100°-110°	682.0	10.5
110°-120°	653.4	10.1
120°-130°	517.2	8.0
130°-140°	415.1	6.4
140°-150°	325.0	5.0
150°-160°	237.8	3.7
160°-170°	147.3	2.3
170°-180°	50.0	0.8
0°-30°	1668.0	25.7
0°-40°	2397.8	36.9
0°-60°	3141.5	48.4
0°-90°	3225.9	49.7
90°-120°	1575.1	24.3
90°-150°	2832.3	43.6
90°-180°	3267.0	50.3
0°-180°	6493.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2704	2704	2704	2704	2704	
5°	2651	2624	2644	2653	2664	246
15°	2186	2178	2256	2331	2381	609
25°	1586	1598	1711	1828	1914	727
35°	1018	1043	1156	1293	1410	631
45°	488	517	604	722	835	383
55°	175	205	264	339	417	164
65°	20	38	84	101	112	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2704.2	2704.2	2704.2	2704.2	2704.2
2.5°	2710.5	2684.9	2691.7	2691.5	2684.3
5°	2650.6	2623.7	2644.0	2653.4	2663.7
7.5°	2538.6	2517.6	2556.7	2585.9	2607.2
10°	2451.7	2433.8	2484.4	2524.4	2553.8
12.5°	2351.3	2337.4	2398.6	2453.4	2491.0
15°	2186.1	2178.5	2255.5	2331.2	2381.1
17.5°	2009.3	2009.0	2096.9	2190.9	2251.0
20°	1887.9	1891.7	1986.0	2089.6	2160.0
22.5°	1766.4	1775.4	1876.1	1984.1	2064.7
25°	1585.6	1598.4	1711.2	1828.3	1914.0
27.5°	1411.9	1430.6	1549.3	1671.0	1775.3
30°	1297.8	1319.6	1440.4	1568.5	1675.9
32.5°	1185.8	1211.7	1329.5	1464.9	1574.4
35°	1017.8	1043.4	1156.5	1292.6	1410.3
37.5°	844.4	869.4	979.9	1113.9	1241.0
40°	731.3	759.5	864.8	994.6	1123.8
42.5°	628.8	656.9	755.9	883.5	1005.5
45°	488.0	517.4	604.4	722.1	834.7
47.5°	371.3	403.3	479.6	586.1	688.7
50°	302.2	334.2	409.5	503.3	601.8
52.5°	246.7	277.7	345.6	434.0	524.4
55°	175.3	204.7	264.3	339.3	417.3
57.5°	121.1	146.5	199.9	262.5	323.7
60°	87.7	112.0	162.2	213.1	263.0
62.5°	58.3	80.6	129.8	168.7	202.3
65°	19.6	37.5	83.7	101.0	112.5
67.5°	9.9	12.0	44.0	46.4	50.2
70°	7.8	7.8	20.9	22.3	26.2
72.5°	5.8	5.8	8.4	10.7	11.5
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°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)