

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: P521263

Luminaire Tested: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521263  
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-125U-100D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 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: 7851.4 lumens  
Efficiency: N/A  
Efficacy: 93.6 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-Indirect

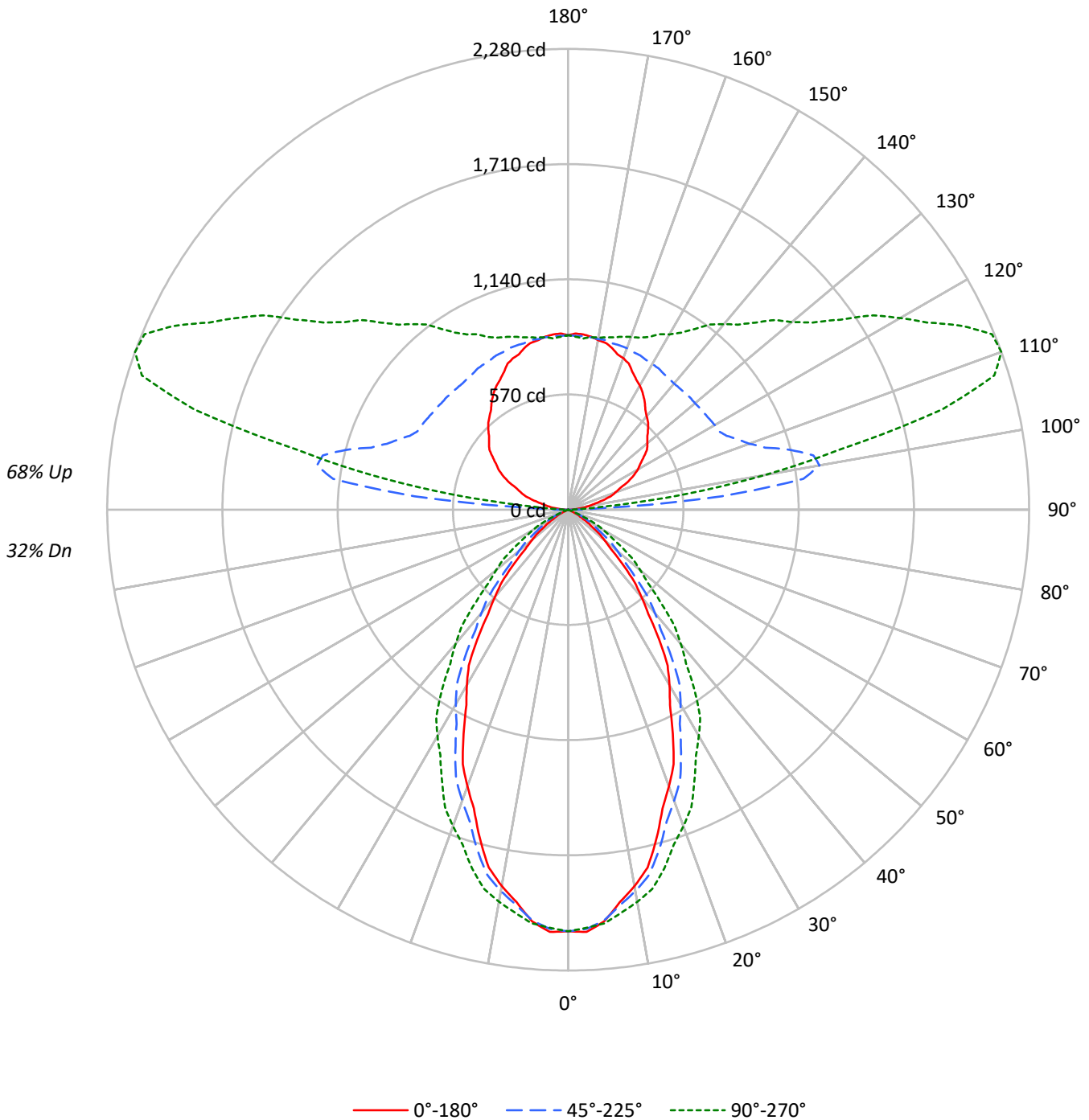
Input Watts (W): 83.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	103	103	103	103	92	92	92	92	73	73	73	56	56	56	39	39	39	32																				
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29																				
2	87	81	75	71	79	73	69	65	59	56	53	46	44	42	33	32	32	26																				
3	80	72	66	61	72	65	60	56	53	49	46	41	39	37	31	29	28	24																				
4	74	65	58	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21																				
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19																				
6	63	52	45	40	57	48	42	37	39	35	32	32	28	26	24	22	21	18																				
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16																				
8	55	44	36	32	50	40	34	30	33	29	25	27	24	21	21	19	17	15																				
9	51	40	33	28	46	37	31	27	31	26	23	25	22	20	19	17	16	14																				
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13																				

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

	0°	45°	90°
0°	19245	19245	19245
5°	18935	18888	19029
10°	17717	17953	18454
15°	16107	16617	17543
20°	14297	15041	16358
25°	12451	13437	15030
30°	10665	11836	13772
35°	8843	10048	12252
40°	6794	8033	10440
45°	4911	6083	8400
50°	3346	4534	6663
55°	2175	3278	5178
60°	1247	2308	3742
65°	330	1410	1895
70°	165	434	545
75°	71	36	0
80°	53	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8400 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.4	2.4
10°-20°	486.8	6.2
20°-30°	609.4	7.8
30°-40°	562.9	7.2
40°-50°	378.3	4.8
50°-60°	195.4	2.5
60°-70°	61.2	0.8
70°-80°	3.9	0.0
80°-90°	0.1	0.0
90°-100°	393.4	5.0
100°-110°	1119.5	14.3
110°-120°	1072.5	13.7
120°-130°	848.9	10.8
130°-140°	681.4	8.7
140°-150°	533.4	6.8
150°-160°	390.3	5.0
160°-170°	241.8	3.1
170°-180°	82.0	1.0
0°-30°	1286.6	16.4
0°-40°	1849.5	23.6
0°-60°	2423.1	30.9
0°-90°	2488.3	31.7
90°-120°	2585.4	32.9
90°-150°	4649.1	59.2
90°-180°	5363.0	68.3
0°-180°	7851.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2044	2024	2039	2047	2055	190
15°	1686	1680	1740	1798	1837	470
25°	1223	1233	1320	1410	1476	561
35°	785	805	892	997	1088	486
45°	376	399	466	557	644	296
55°	135	158	204	262	322	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	43	170	762	264	162	49
105°	174	264	1141	2015	1916	184
115°	323	391	865	1832	2152	318
125°	456	506	826	1370	1638	408
135°	558	605	816	1157	1308	431
145°	658	692	822	1002	1092	411
155°	752	769	842	905	942	348
165°	831	834	852	870	883	234
175°	870	865	862	857	850	82
180°	863	863	863	863	863	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2085.9	2085.9	2085.9	2085.9	2085.9
2.5°	2090.7	2071.0	2076.2	2076.1	2070.5
5°	2044.5	2023.8	2039.4	2046.7	2054.6
7.5°	1958.1	1941.9	1972.0	1994.6	2011.0
10°	1891.1	1877.3	1916.3	1947.1	1969.8
12.5°	1813.6	1802.9	1850.1	1892.4	1921.4
15°	1686.3	1680.3	1739.7	1798.1	1836.6
17.5°	1549.8	1549.6	1617.4	1689.9	1736.3
20°	1456.2	1459.1	1531.9	1611.8	1666.1
22.5°	1362.5	1369.4	1447.1	1530.4	1592.6
25°	1223.1	1232.9	1319.9	1410.2	1476.4
27.5°	1089.1	1103.5	1195.0	1288.9	1369.4
30°	1001.1	1017.8	1111.0	1209.8	1292.7
32.5°	914.7	934.6	1025.5	1129.9	1214.4
35°	785.1	804.8	892.1	997.1	1087.8
37.5°	651.3	670.6	755.8	859.2	957.3
40°	564.1	585.8	667.0	767.2	866.8
42.5°	485.0	506.7	583.1	681.5	775.6
45°	376.4	399.1	466.2	557.0	643.8
47.5°	286.4	311.1	369.9	452.1	531.2
50°	233.1	257.8	315.9	388.2	464.2
52.5°	190.3	214.2	266.6	334.8	404.5
55°	135.2	157.9	203.8	261.7	321.9
57.5°	93.4	113.0	154.2	202.5	249.7
60°	67.6	86.4	125.1	164.4	202.8
62.5°	45.0	62.2	100.1	130.2	156.0
65°	15.1	29.0	64.6	77.9	86.8
67.5°	7.7	9.2	33.9	35.8	38.8
70°	6.1	6.1	16.1	17.2	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	13.1	69.6	161.5	47.0	35.5
95°	42.7	169.5	761.6	263.6	162.5
97.5°	78.5	198.5	1173.0	839.3	575.2
100°	103.4	215.8	1262.3	1278.6	984.9
102.5°	131.0	234.3	1242.6	1636.6	1380.1
105°	174.0	263.9	1140.8	2015.1	1915.6
107.5°	217.7	298.2	1022.0	2121.8	2210.4
110°	247.9	323.3	953.7	2080.9	2279.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	276.7	348.3	907.7	1984.4	2268.1
115°	323.4	390.8	865.0	1832.5	2151.9
117.5°	364.4	427.6	839.8	1666.5	2004.8
120°	397.2	450.2	837.1	1571.7	1895.9
122.5°	423.5	476.5	830.6	1488.4	1789.5
125°	456.3	506.1	825.6	1370.1	1638.1
127.5°	492.1	538.6	823.0	1299.5	1520.3
130°	510.5	557.0	819.1	1250.2	1442.8
132.5°	530.2	575.4	819.1	1211.8	1389.0
135°	558.1	604.6	815.8	1157.4	1308.2
137.5°	584.3	629.6	815.5	1111.3	1241.6
140°	604.0	650.6	814.2	1073.1	1198.2
142.5°	626.4	665.2	818.1	1042.6	1154.9
145°	658.2	691.9	822.4	1001.7	1091.6
147.5°	685.5	718.2	829.6	960.4	1038.0
150°	709.1	731.6	832.2	946.7	1001.3
152.5°	727.5	751.2	834.8	928.2	978.9
155°	751.8	769.4	842.1	905.3	942.2
157.5°	782.0	792.6	843.7	894.9	921.2
160°	797.7	805.8	850.3	886.9	909.4
162.5°	806.9	816.2	851.6	880.2	897.5
165°	830.6	833.8	851.9	870.3	883.1
167.5°	846.7	843.8	859.5	867.8	872.9
170°	851.9	850.3	856.8	858.6	865.0
172.5°	863.7	858.3	860.8	856.0	861.1
175°	870.0	865.1	861.8	856.7	850.3
177.5°	872.6	864.9	860.8	855.5	856.8
180°	863.4	863.4	863.4	863.4	863.4

(END OF REPORT)