

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: P521265

Luminaire Tested: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521265  
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\_4000K  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8186.9 lumens  
Efficiency: N/A  
Efficacy: 97.6 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

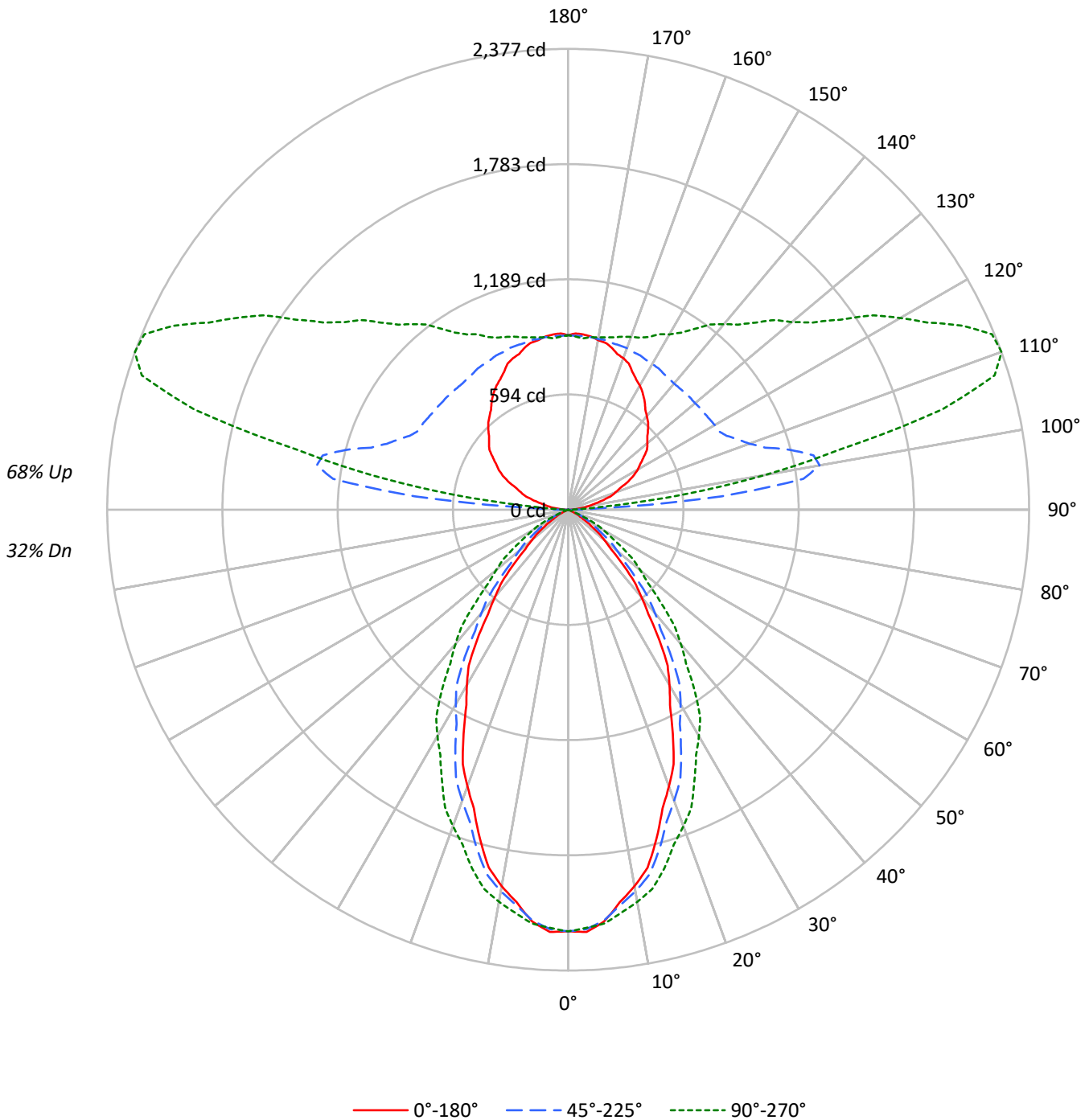
Input Watts (W): 83.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20				20				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	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°	20067	20067	20067
5°	19744	19695	19842
10°	18474	18720	19243
15°	16795	17328	18292
20°	14908	15683	17057
25°	12983	14011	15671
30°	11120	12342	14360
35°	9220	10477	12776
40°	7084	8377	10887
45°	5121	6343	8759
50°	3489	4728	6947
55°	2268	3420	5400
60°	1301	2408	3903
65°	345	1469	1976
70°	170	453	566
75°	75	39	0
80°	58	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8759 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.5	2.4
10°-20°	507.6	6.2
20°-30°	635.5	7.8
30°-40°	587.0	7.2
40°-50°	394.4	4.8
50°-60°	203.7	2.5
60°-70°	63.8	0.8
70°-80°	4.0	0.0
80°-90°	0.1	0.0
90°-100°	410.2	5.0
100°-110°	1167.3	14.3
110°-120°	1118.4	13.7
120°-130°	885.2	10.8
130°-140°	710.5	8.7
140°-150°	556.2	6.8
150°-160°	407.0	5.0
160°-170°	252.1	3.1
170°-180°	85.5	1.0
0°-30°	1341.6	16.4
0°-40°	1928.5	23.6
0°-60°	2526.7	30.9
0°-90°	2594.6	31.7
90°-120°	2695.9	32.9
90°-150°	4847.7	59.2
90°-180°	5592.0	68.3
0°-180°	8186.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2132	2110	2127	2134	2142	198
15°	1758	1752	1814	1875	1915	490
25°	1275	1286	1376	1470	1539	585
35°	819	839	930	1040	1134	507
45°	392	416	486	581	671	308
55°	141	165	213	273	336	132
65°	16	30	67	81	90	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	44	177	794	275	169	51
105°	181	275	1190	2101	1997	192
115°	337	408	902	1911	2244	332
125°	476	528	861	1429	1708	426
135°	582	630	851	1207	1364	449
145°	686	722	858	1044	1138	429
155°	784	802	878	944	982	362
165°	866	869	888	907	921	244
175°	907	902	899	893	887	86
180°	900	900	900	900	900	

TEST NUMBER: P521265

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2175.0	2175.0	2175.0	2175.0	2175.0
2.5°	2180.0	2159.5	2164.9	2164.8	2159.0
5°	2131.9	2110.2	2126.6	2134.1	2142.4
7.5°	2041.8	2024.9	2056.3	2079.8	2096.9
10°	1971.9	1957.5	1998.2	2030.3	2054.0
12.5°	1891.1	1880.0	1929.2	1973.2	2003.5
15°	1758.3	1752.1	1814.1	1875.0	1915.1
17.5°	1616.0	1615.8	1686.5	1762.1	1810.5
20°	1518.4	1521.5	1597.3	1680.7	1737.3
22.5°	1420.7	1427.9	1508.9	1595.8	1660.7
25°	1275.3	1285.6	1376.3	1470.5	1539.4
27.5°	1135.6	1150.6	1246.1	1343.9	1427.9
30°	1043.8	1061.3	1158.5	1261.5	1347.9
32.5°	953.8	974.5	1069.3	1178.2	1266.3
35°	818.6	839.2	930.2	1039.7	1134.3
37.5°	679.1	699.3	788.1	895.9	998.2
40°	588.2	610.8	695.5	800.0	903.9
42.5°	505.7	528.3	608.0	710.6	808.8
45°	392.5	416.2	486.1	580.8	671.3
47.5°	298.6	324.3	385.8	471.4	553.9
50°	243.1	268.8	329.4	404.8	484.0
52.5°	198.5	223.4	278.0	349.1	421.7
55°	141.0	164.7	212.6	272.9	335.7
57.5°	97.4	117.8	160.8	211.1	260.3
60°	70.5	90.0	130.5	171.4	211.5
62.5°	46.9	64.8	104.4	135.7	162.7
65°	15.8	30.2	67.3	81.2	90.5
67.5°	8.0	9.6	35.4	37.3	40.4
70°	6.3	6.3	16.8	18.0	21.0
72.5°	4.6	4.6	6.7	8.6	9.3
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.8	0.0	0.0
80°	1.1	1.1	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°	13.7	72.6	168.4	49.0	37.0
95°	44.5	176.7	794.2	274.9	169.4
97.5°	81.8	207.0	1223.1	875.2	599.7
100°	107.8	225.0	1316.2	1333.2	1026.9
102.5°	136.6	244.4	1295.7	1706.5	1439.1
105°	181.4	275.1	1189.5	2101.2	1997.4
107.5°	227.0	311.0	1065.6	2212.4	2304.8
110°	258.4	337.1	994.4	2169.9	2377.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	288.6	363.2	946.5	2069.2	2365.0
115°	337.2	407.5	902.0	1910.8	2243.9
117.5°	380.0	445.9	875.6	1737.7	2090.5
120°	414.2	469.4	872.9	1638.8	1976.9
122.5°	441.6	496.8	866.1	1552.0	1866.0
125°	475.8	527.7	860.9	1428.7	1708.1
127.5°	513.1	561.7	858.2	1355.0	1585.3
130°	532.3	580.8	854.1	1303.6	1504.5
132.5°	552.8	600.0	854.1	1263.6	1448.3
135°	581.9	630.5	850.7	1206.8	1364.1
137.5°	609.3	656.5	850.3	1158.7	1294.6
140°	629.9	678.4	848.9	1118.9	1249.4
142.5°	653.1	693.6	853.0	1087.1	1204.3
145°	686.3	721.5	857.5	1044.5	1138.2
147.5°	714.8	748.9	865.0	1001.4	1082.4
150°	739.4	762.8	867.8	987.2	1044.1
152.5°	758.6	783.3	870.5	967.9	1020.8
155°	783.9	802.3	878.0	943.9	982.4
157.5°	815.4	826.4	879.7	933.1	960.5
160°	831.8	840.2	886.6	924.8	948.2
162.5°	841.4	851.1	888.0	917.8	935.9
165°	866.1	869.4	888.3	907.4	920.8
167.5°	882.8	879.8	896.2	904.9	910.2
170°	888.3	886.6	893.4	895.3	902.0
172.5°	900.6	894.9	897.5	892.5	897.9
175°	907.1	902.1	898.6	893.3	886.6
177.5°	909.9	901.8	897.5	892.1	893.4
180°	900.3	900.3	900.3	900.3	900.3

(END OF REPORT)