

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: P521262

Luminaire Tested: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521262  
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\_2700K  
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 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7692.0 lumens  
Efficiency: N/A  
Efficacy: 91.9 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: Semi-Indirect

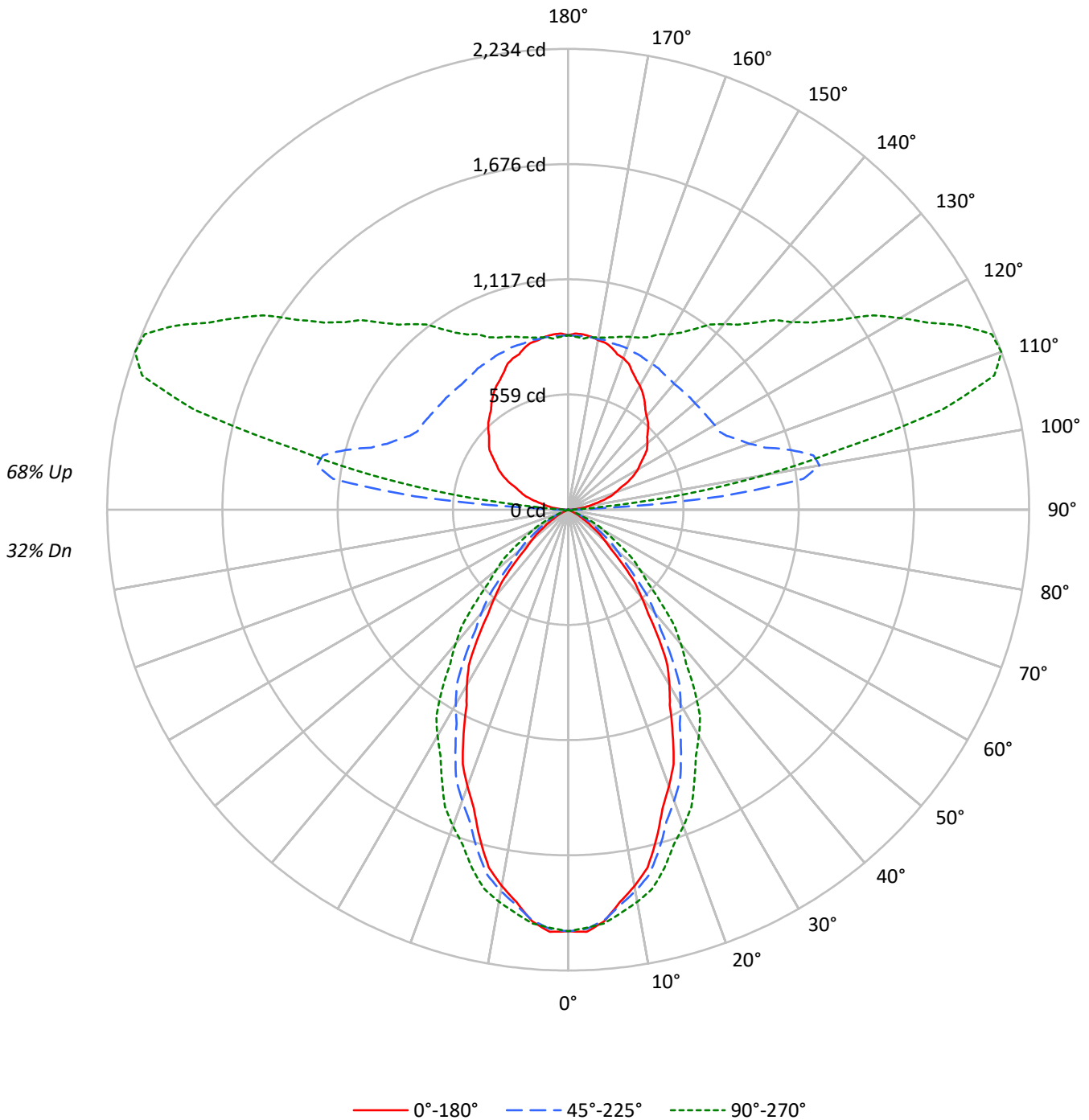
Input Watts (W): 83.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	18854	18854	18854
5°	18551	18504	18642
10°	17357	17588	18079
15°	15779	16280	17186
20°	14007	14735	16025
25°	12198	13164	14724
30°	10448	11596	13492
35°	8664	9844	12004
40°	6655	7871	10228
45°	4812	5960	8231
50°	3278	4441	6528
55°	2131	3212	5073
60°	1222	2262	3666
65°	323	1382	1856
70°	159	426	534
75°	71	36	0
80°	53	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8231 cd/sqm

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CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.5	2.4
10°-20°	476.9	6.2
20°-30°	597.1	7.8
30°-40°	551.5	7.2
40°-50°	370.6	4.8
50°-60°	191.4	2.5
60°-70°	60.0	0.8
70°-80°	3.8	0.0
80°-90°	0.1	0.0
90°-100°	385.4	5.0
100°-110°	1096.7	14.3
110°-120°	1050.8	13.7
120°-130°	831.6	10.8
130°-140°	667.5	8.7
140°-150°	522.6	6.8
150°-160°	382.4	5.0
160°-170°	236.8	3.1
170°-180°	80.4	1.0
0°-30°	1260.5	16.4
0°-40°	1812.0	23.6
0°-60°	2373.9	30.9
0°-90°	2437.7	31.7
90°-120°	2532.9	32.9
90°-150°	4554.7	59.2
90°-180°	5254.0	68.3
0°-180°	7692.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2003	1983	1998	2005	2013	186
15°	1652	1646	1704	1762	1799	460
25°	1198	1208	1293	1382	1446	549
35°	769	788	874	977	1066	476
45°	369	391	457	546	631	290
55°	132	155	200	256	315	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	42	166	746	258	159	48
105°	170	258	1118	1974	1877	180
115°	317	383	848	1795	2108	312
125°	447	496	809	1342	1605	400
135°	547	592	799	1134	1282	422
145°	645	678	806	981	1069	403
155°	736	754	825	887	923	340
165°	814	817	835	853	865	229
175°	852	848	844	839	833	81
180°	846	846	846	846	846	

TEST NUMBER: P521262

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2043.5	2043.5	2043.5	2043.5	2043.5
2.5°	2048.3	2028.9	2034.0	2033.9	2028.5
5°	2003.0	1982.7	1998.0	2005.1	2012.9
7.5°	1918.4	1902.5	1932.0	1954.1	1970.2
10°	1852.7	1839.2	1877.4	1907.6	1929.8
12.5°	1776.8	1766.3	1812.6	1853.9	1882.4
15°	1652.0	1646.2	1704.4	1761.6	1799.3
17.5°	1518.4	1518.2	1584.6	1655.6	1701.1
20°	1426.6	1429.5	1500.8	1579.1	1632.2
22.5°	1334.9	1341.6	1417.7	1499.4	1560.3
25°	1198.2	1207.9	1293.1	1381.6	1446.4
27.5°	1066.9	1081.1	1170.7	1262.7	1341.6
30°	980.7	997.2	1088.5	1185.2	1266.4
32.5°	896.1	915.6	1004.7	1107.0	1189.7
35°	769.2	788.5	874.0	976.8	1065.8
37.5°	638.1	657.0	740.5	841.7	937.8
40°	552.6	573.9	653.5	751.6	849.2
42.5°	475.1	496.4	571.2	667.6	759.9
45°	368.8	391.0	456.8	545.7	630.8
47.5°	280.6	304.7	362.4	442.9	520.4
50°	228.4	252.5	309.4	380.3	454.8
52.5°	186.5	209.9	261.2	328.0	396.2
55°	132.5	154.7	199.7	256.4	315.4
57.5°	91.5	110.7	151.1	198.4	244.6
60°	66.2	84.6	122.6	161.0	198.7
62.5°	44.1	60.9	98.1	127.5	152.8
65°	14.8	28.4	63.3	76.3	85.0
67.5°	7.5	9.1	33.2	35.1	38.0
70°	5.9	5.9	15.8	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
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°	12.9	68.2	158.2	46.1	34.7
95°	41.8	166.0	746.2	258.3	159.2
97.5°	76.9	194.5	1149.2	822.3	563.5
100°	101.3	211.4	1236.6	1252.6	964.9
102.5°	128.3	229.6	1217.3	1603.4	1352.1
105°	170.5	258.5	1117.6	1974.1	1876.7
107.5°	213.2	292.2	1001.2	2078.7	2165.5
110°	242.8	316.7	934.3	2038.7	2233.7

TEST NUMBER: P521262

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_2700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	271.1	341.3	889.3	1944.1	2222.1
115°	316.8	382.8	847.5	1795.3	2108.2
117.5°	357.0	419.0	822.7	1632.7	1964.1
120°	389.2	441.0	820.1	1539.7	1857.4
122.5°	414.9	466.8	813.7	1458.2	1753.2
125°	447.1	495.8	808.9	1342.3	1604.9
127.5°	482.1	527.7	806.3	1273.1	1489.4
130°	500.1	545.7	802.4	1224.8	1413.5
132.5°	519.4	563.8	802.4	1187.2	1360.8
135°	546.8	592.4	799.2	1133.9	1281.7
137.5°	572.5	616.8	798.9	1088.7	1216.4
140°	591.8	637.4	797.6	1051.3	1173.9
142.5°	613.7	651.7	801.5	1021.4	1131.5
145°	644.8	677.9	805.7	981.3	1069.4
147.5°	671.5	703.6	812.7	940.9	1017.0
150°	694.7	716.7	815.3	927.5	980.9
152.5°	712.7	736.0	817.9	909.4	959.1
155°	736.5	753.8	825.0	886.9	923.1
157.5°	766.1	776.5	826.6	876.7	902.5
160°	781.5	789.4	833.0	868.9	890.9
162.5°	790.5	799.7	834.3	862.3	879.3
165°	813.7	816.8	834.6	852.6	865.2
167.5°	829.5	826.6	842.0	850.2	855.2
170°	834.6	833.0	839.4	841.2	847.5
172.5°	846.2	840.8	843.3	838.6	843.6
175°	852.3	847.6	844.3	839.3	833.0
177.5°	854.9	847.3	843.3	838.2	839.4
180°	845.9	845.9	845.9	845.9	845.9

(END OF REPORT)