

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: P521990

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521990  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE 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: 8537.5 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

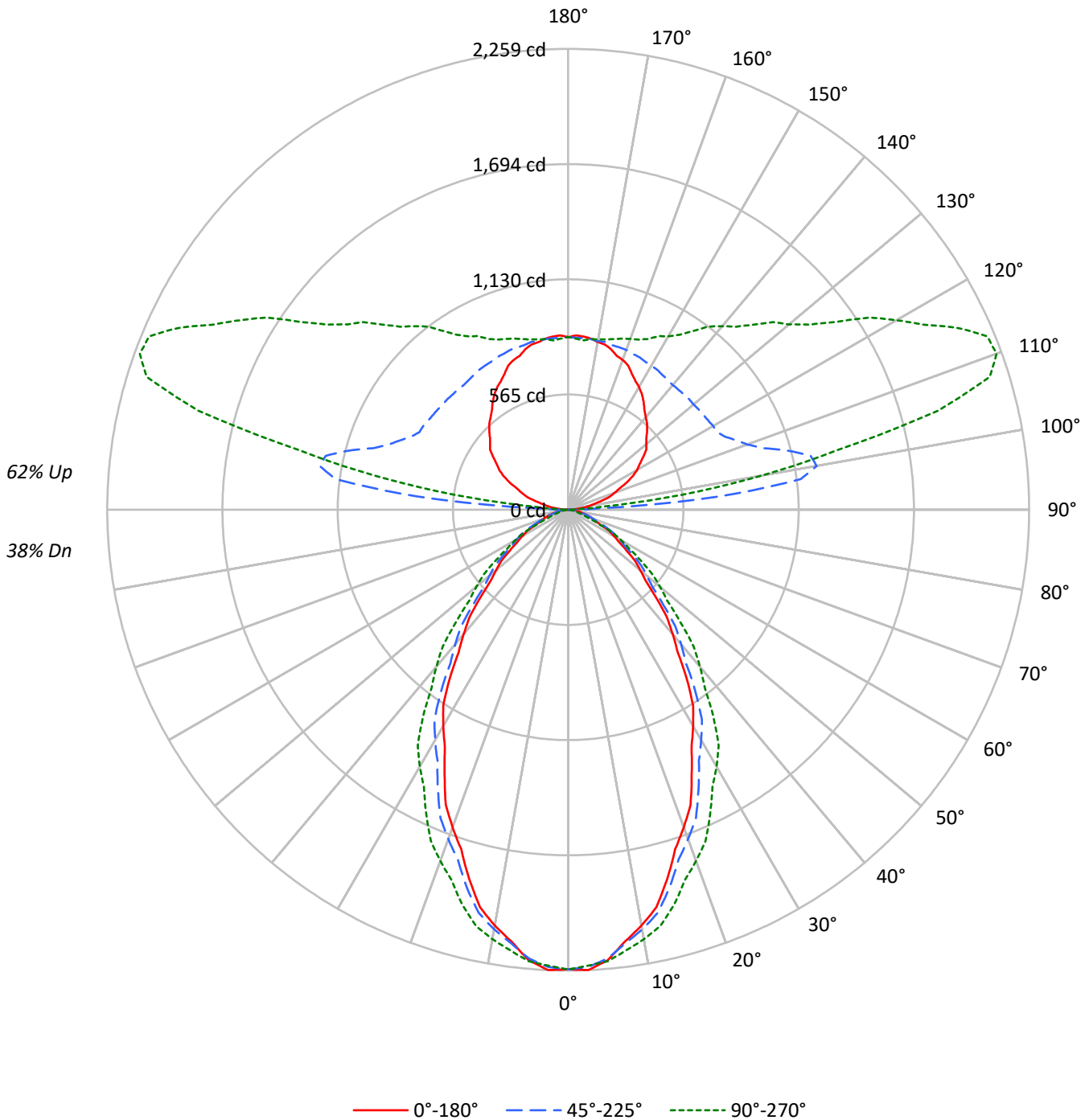
Input Watts (W): 83.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521990

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

### Luminous Intensity Polar Plot



TEST NUMBER: P521990

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

**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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	38				
1	96	92	89	86	87	84	81	78	69	67	65	55	53	52	42	41	40	34				
2	88	82	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30				
3	81	72	66	61	74	66	61	56	55	51	47	44	41	39	34	33	31	27				
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	28	24				
5	69	58	51	45	63	53	47	42	45	40	36	36	33	30	29	26	25	21				
6	64	52	45	40	58	48	42	37	41	36	32	33	30	27	26	24	22	19				
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17				
8	55	43	36	31	50	40	34	29	34	29	26	28	25	22	23	20	18	16				
9	51	40	33	28	47	37	31	26	31	27	23	26	23	20	21	19	17	15				
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	14				

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

	0°	45°	90°
0°	20788	20788	20788
5°	20528	20455	20574
10°	19395	19571	20024
15°	17905	18320	19142
20°	16259	16871	17986
25°	14583	15378	16757
30°	13039	13892	15483
35°	11403	12226	13974
40°	9597	10359	12098
45°	7920	8604	10100
50°	6613	7208	8415
55°	5614	6186	6949
60°	4798	5364	5545
65°	3820	4510	3582
70°	3388	3520	2188
75°	3137	2855	1340
80°	2890	2625	1158
85°	2615	2403	942

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10100 cd/sqm

TEST NUMBER: P521990

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.7	2.4
10°-20°	537.5	6.3
20°-30°	696.3	8.2
30°-40°	681.8	8.0
40°-50°	521.9	6.1
50°-60°	347.8	4.1
60°-70°	189.8	2.2
70°-80°	79.1	0.9
80°-90°	22.4	0.3
90°-100°	385.4	4.5
100°-110°	1096.7	12.8
110°-120°	1050.8	12.3
120°-130°	831.6	9.7
130°-140°	667.5	7.8
140°-150°	522.6	6.1
150°-160°	382.4	4.5
160°-170°	236.8	2.8
170°-180°	80.4	0.9
0°-30°	1440.5	16.9
0°-40°	2122.3	24.9
0°-60°	2992.0	35.0
0°-90°	3283.2	38.5
90°-120°	2532.9	29.7
90°-150°	4554.7	53.3
90°-180°	5254.0	61.5
0°-180°	8537.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2253	2253	2253	2253	2253	
5°	2216	2194	2209	2214	2222	206
15°	1874	1868	1918	1970	2004	523
25°	1432	1436	1511	1576	1646	659
35°	1012	1017	1086	1159	1241	629
45°	607	619	659	709	774	473
55°	349	364	385	399	432	316
65°	175	190	207	180	164	182
75°	88	88	80	55	38	94
85°	25	25	23	15	9	27
90°	0	0	0	0	0	3
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: P521990

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2253.1	2253.1	2253.1	2253.1	2253.1
2.5°	2258.6	2238.5	2243.6	2243.5	2237.3
5°	2216.5	2194.3	2208.6	2213.7	2221.5
7.5°	2134.3	2117.5	2143.6	2162.9	2178.6
10°	2070.2	2055.7	2089.0	2117.1	2137.4
12.5°	1995.9	1983.7	2024.9	2062.7	2089.2
15°	1874.5	1867.7	1918.0	1970.1	2004.0
17.5°	1744.6	1741.3	1798.9	1859.8	1903.1
20°	1656.0	1655.0	1718.3	1781.7	1831.9
22.5°	1566.6	1568.7	1635.2	1701.2	1758.4
25°	1432.5	1436.4	1510.6	1576.5	1646.1
27.5°	1308.6	1310.3	1387.1	1456.6	1530.8
30°	1223.9	1228.8	1304.0	1376.0	1453.3
32.5°	1139.3	1144.9	1218.6	1293.0	1371.8
35°	1012.4	1017.2	1085.5	1158.6	1240.7
37.5°	881.5	888.0	948.7	1017.8	1098.6
40°	796.8	806.5	860.1	925.2	1004.5
42.5°	715.4	727.4	777.1	838.8	910.3
45°	607.0	618.6	659.4	709.3	774.1
47.5°	513.7	527.0	558.4	601.4	656.7
50°	460.7	473.3	502.2	534.1	586.3
52.5°	414.0	426.6	452.4	476.9	521.4
55°	349.0	363.5	384.6	399.2	432.0
57.5°	295.6	309.5	326.3	332.8	352.7
60°	260.0	275.5	290.7	289.9	300.5
62.5°	227.6	240.7	255.9	245.4	246.0
65°	175.0	189.5	206.6	180.5	164.1
67.5°	141.4	144.5	162.1	125.9	106.4
70°	125.6	125.6	130.5	97.5	81.1
72.5°	110.5	110.5	106.0	79.3	62.1
75°	88.0	88.0	80.1	55.0	37.6
77.5°	67.8	67.0	61.3	41.0	27.3
80°	54.4	54.4	49.4	32.4	21.8
82.5°	42.5	42.5	38.4	25.3	16.2
85°	24.7	24.7	22.7	14.7	8.9
87.5°	8.7	8.7	7.9	4.7	4.0
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: P521990

CATALOG NUMBER: SQ4-WB-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)