

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: P521996

Luminaire Tested: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521996  
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\_5700K  
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 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9468.4 lumens  
Efficiency: N/A  
Efficacy: 113.1 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

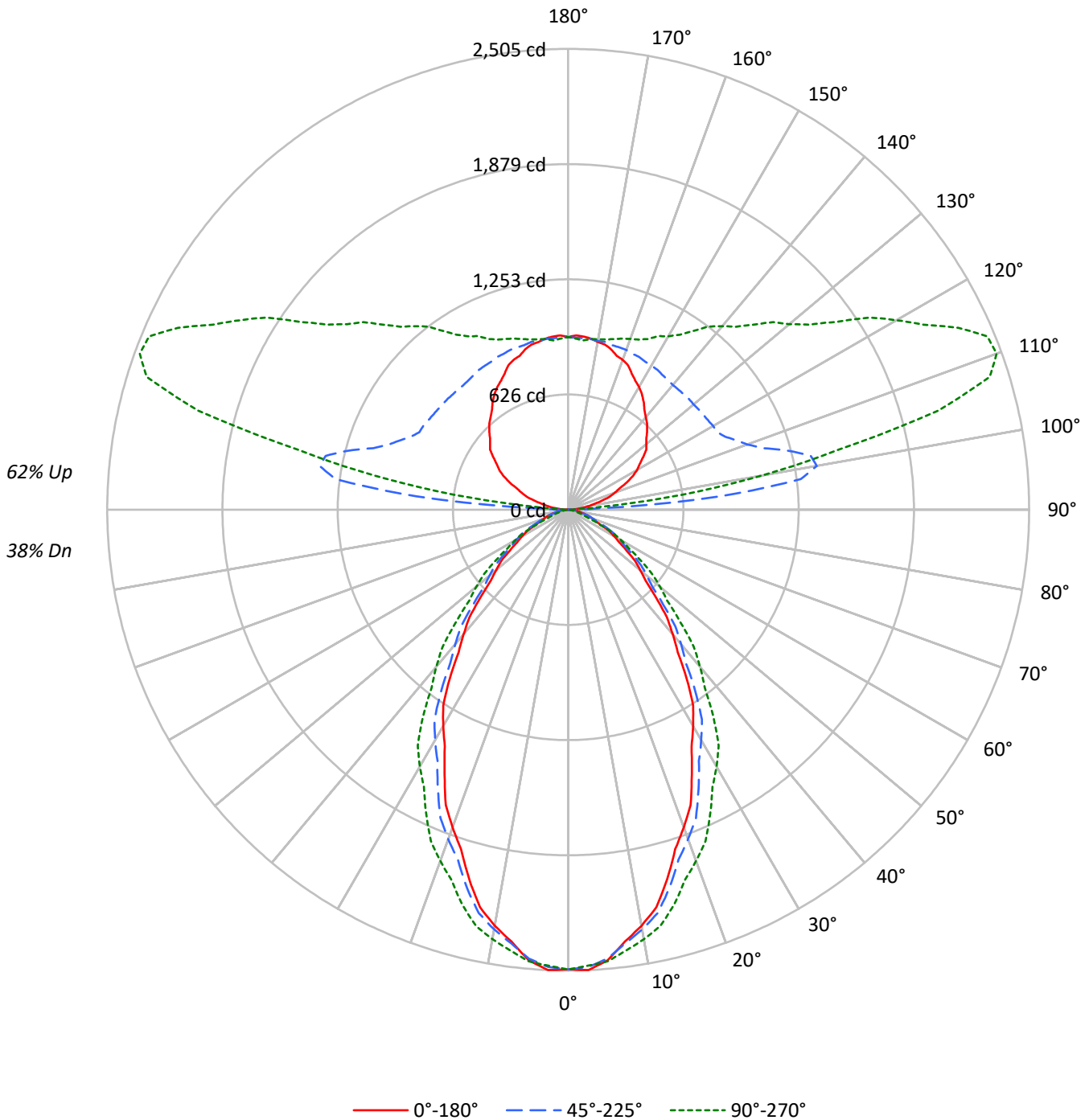
Input Watts (W): 83.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	23054	23054	23054
5°	22766	22686	22817
10°	21510	21705	22208
15°	19857	20317	21229
20°	18032	18710	19948
25°	16174	17056	18585
30°	14461	15407	17171
35°	12646	13560	15498
40°	10643	11489	13417
45°	8784	9542	11202
50°	7333	7995	9333
55°	6225	6860	7707
60°	5322	5949	6150
65°	4237	5004	3973
70°	3755	3903	2425
75°	3479	3165	1486
80°	3204	2912	1280
85°	2901	2668	1048

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11202 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.2	2.4
10°-20°	596.2	6.3
20°-30°	772.2	8.2
30°-40°	756.2	8.0
40°-50°	578.8	6.1
50°-60°	385.7	4.1
60°-70°	210.5	2.2
70°-80°	87.7	0.9
80°-90°	24.8	0.3
90°-100°	427.5	4.5
100°-110°	1216.3	12.8
110°-120°	1165.4	12.3
120°-130°	922.3	9.7
130°-140°	740.3	7.8
140°-150°	579.6	6.1
150°-160°	424.1	4.5
160°-170°	262.7	2.8
170°-180°	89.1	0.9
0°-30°	1597.6	16.9
0°-40°	2353.7	24.9
0°-60°	3318.2	35.0
0°-90°	3641.2	38.5
90°-120°	2809.1	29.7
90°-150°	5051.4	53.3
90°-180°	5827.0	61.5
0°-180°	9468.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2499	2499	2499	2499	2499	
5°	2458	2434	2450	2455	2464	229
15°	2079	2071	2127	2185	2222	581
25°	1589	1593	1675	1748	1826	731
35°	1123	1128	1204	1285	1376	698
45°	673	686	731	787	858	525
55°	387	403	426	443	479	351
65°	194	210	229	200	182	202
75°	98	98	89	61	42	104
85°	27	27	25	16	10	30
90°	0	0	0	0	0	3
95°	46	184	828	286	177	53
105°	189	287	1240	2189	2081	200
115°	351	425	940	1991	2338	346
125°	496	550	897	1489	1780	444
135°	606	657	886	1258	1421	468
145°	715	752	894	1088	1186	447
155°	817	836	915	984	1024	378
165°	902	906	926	946	960	254
175°	945	940	936	931	924	90
180°	938	938	938	938	938	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2498.8	2498.8	2498.8	2498.8	2498.8
2.5°	2504.9	2482.7	2488.3	2488.1	2481.3
5°	2458.2	2433.6	2449.5	2455.1	2463.7
7.5°	2367.0	2348.4	2377.3	2398.8	2416.1
10°	2296.0	2279.9	2316.8	2348.0	2370.5
12.5°	2213.5	2200.0	2245.7	2287.6	2317.0
15°	2078.9	2071.4	2127.1	2185.0	2222.5
17.5°	1934.8	1931.2	1995.1	2062.6	2110.7
20°	1836.6	1835.5	1905.6	1976.0	2031.7
22.5°	1737.4	1739.8	1813.5	1886.7	1950.1
25°	1588.8	1593.0	1675.4	1748.4	1825.6
27.5°	1451.3	1453.2	1538.3	1615.4	1697.7
30°	1357.4	1362.8	1446.2	1526.0	1611.8
32.5°	1263.5	1269.8	1351.5	1434.0	1521.4
35°	1122.8	1128.1	1203.9	1284.9	1376.0
37.5°	977.6	984.9	1052.2	1128.7	1218.4
40°	883.7	894.5	953.9	1026.1	1114.0
42.5°	793.4	806.7	861.8	930.3	1009.6
45°	673.2	686.1	731.3	786.7	858.5
47.5°	569.7	584.5	619.3	666.9	728.3
50°	510.9	524.9	557.0	592.3	650.2
52.5°	459.2	473.1	501.7	529.0	578.3
55°	387.0	403.1	426.5	442.7	479.1
57.5°	327.8	343.3	361.8	369.1	391.2
60°	288.4	305.5	322.4	321.5	333.3
62.5°	252.4	267.0	283.8	272.2	272.8
65°	194.1	210.2	229.2	200.2	182.0
67.5°	156.8	160.2	179.8	139.6	118.0
70°	139.2	139.2	144.7	108.1	89.9
72.5°	122.6	122.6	117.5	87.9	68.9
75°	97.6	97.6	88.8	61.0	41.7
77.5°	75.2	74.4	68.0	45.5	30.3
80°	60.3	60.3	54.8	35.9	24.1
82.5°	47.1	47.1	42.5	28.1	18.0
85°	27.4	27.4	25.2	16.3	9.9
87.5°	9.6	9.6	8.8	5.2	4.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.3	75.7	175.5	51.1	38.5
95°	46.4	184.1	827.5	286.4	176.6
97.5°	85.2	215.7	1274.5	912.0	624.9
100°	112.4	234.4	1371.5	1389.2	1070.1
102.5°	142.3	254.6	1350.1	1778.2	1499.5
105°	189.0	286.7	1239.5	2189.4	2081.3
107.5°	236.5	324.0	1110.4	2305.4	2401.6
110°	269.3	351.3	1036.2	2261.0	2477.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	300.7	378.5	986.3	2156.1	2464.4
115°	351.3	424.6	939.9	1991.1	2338.1
117.5°	395.9	464.6	912.4	1810.7	2178.3
120°	431.6	489.1	909.6	1707.7	2059.9
122.5°	460.1	517.7	902.4	1617.2	1944.3
125°	495.8	549.9	897.1	1488.7	1779.9
127.5°	534.7	585.3	894.2	1411.9	1651.8
130°	554.7	605.2	890.0	1358.4	1567.7
132.5°	576.1	625.2	890.0	1316.7	1509.2
135°	606.4	657.0	886.4	1257.5	1421.4
137.5°	634.9	684.1	886.0	1207.4	1349.0
140°	656.3	706.9	884.6	1165.9	1301.9
142.5°	680.6	722.8	888.9	1132.8	1254.8
145°	715.2	751.8	893.5	1088.4	1186.0
147.5°	744.8	780.4	901.4	1043.5	1127.9
150°	770.5	794.9	904.2	1028.6	1087.9
152.5°	790.4	816.2	907.1	1008.6	1063.7
155°	816.8	836.0	914.9	983.6	1023.7
157.5°	849.6	861.2	916.7	972.3	1000.9
160°	866.8	875.5	923.8	963.6	988.0
162.5°	876.8	886.9	925.3	956.4	975.2
165°	902.4	905.9	925.6	945.6	959.5
167.5°	919.9	916.8	933.8	942.9	948.4
170°	925.6	923.9	931.0	932.9	939.9
172.5°	938.5	932.5	935.3	930.0	935.6
175°	945.2	940.0	936.3	930.8	923.8
177.5°	948.1	939.7	935.3	929.6	931.0
180°	938.1	938.1	938.1	938.1	938.1

(END OF REPORT)