

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: P521735

Luminaire Tested: SQ4-WB-025U-100D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521735  
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-025U-100D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5616.2 lumens  
Efficiency: N/A  
Efficacy: 99.8 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-Direct

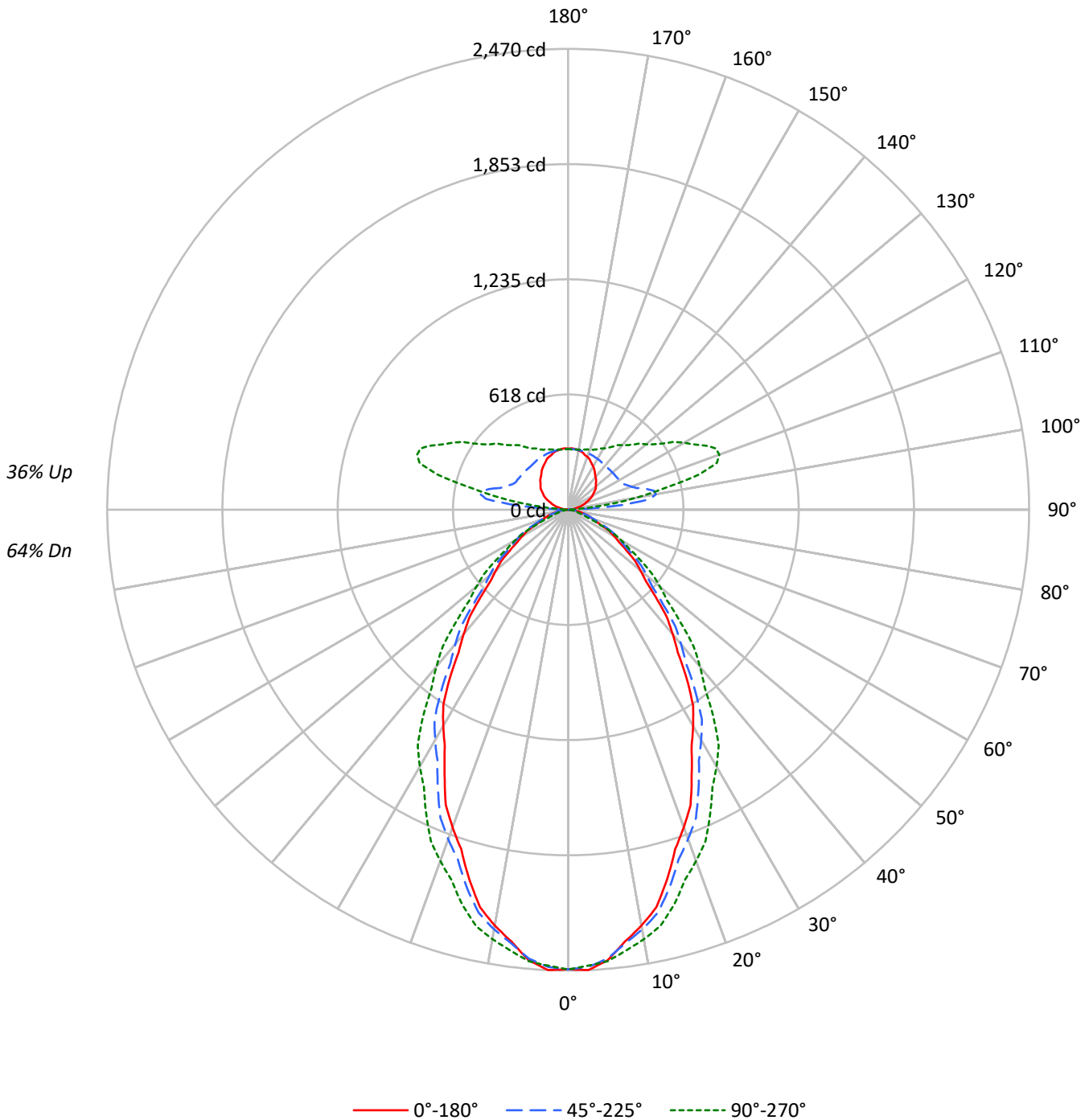
Input Watts (W): 56.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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									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	110	110	110	110	104	104	104	104	91	91	91	80	80	80	69	69	69	64																			
1	102	98	95	92	96	93	90	87	82	80	78	72	71	69	63	62	61	57																			
2	94	88	82	78	89	83	78	74	74	70	67	65	63	60	57	56	54	50																			
3	87	79	72	67	82	74	69	64	66	62	58	59	56	53	52	50	48	44																			
4	81	71	63	58	76	67	61	56	60	55	51	54	50	47	48	45	42	39																			
5	75	64	56	51	70	61	54	49	55	49	45	49	45	42	44	41	38	35																			
6	69	58	51	45	65	55	49	44	50	45	40	45	41	37	41	37	34	32																			
7	65	53	46	40	61	51	44	39	46	41	36	42	37	34	38	34	31	29																			
8	60	49	42	37	57	47	40	35	43	37	33	39	34	31	35	31	29	27																			
9	57	45	38	33	54	43	37	32	39	34	30	36	31	28	33	29	26	24																			
10	53	42	35	30	50	40	34	29	37	31	28	33	29	26	31	27	24	22																			

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

	0°	45°	90°
0°	22731	22731	22731
5°	22447	22367	22497
10°	21208	21401	21896
15°	19578	20032	20931
20°	17779	18448	19668
25°	15946	16815	18324
30°	14258	15191	16929
35°	12468	13369	15281
40°	10494	11327	13228
45°	8661	9409	11045
50°	7231	7883	9202
55°	6138	6764	7599
60°	5246	5864	6063
65°	4176	4932	3919
70°	3704	3849	2390
75°	3429	3123	1465
80°	3161	2874	1265
85°	2858	2636	1027

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11045 cd/sqm

TEST NUMBER: P521735

CATALOG NUMBER: SQ4-WB-025U-100D-92765-1D-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.0	4.0
10°-20°	587.8	10.5
20°-30°	761.4	13.6
30°-40°	745.6	13.3
40°-50°	570.7	10.2
50°-60°	380.3	6.8
60°-70°	207.5	3.7
70°-80°	86.5	1.5
80°-90°	24.5	0.4
90°-100°	148.6	2.6
100°-110°	422.9	7.5
110°-120°	405.2	7.2
120°-130°	320.7	5.7
130°-140°	257.4	4.6
140°-150°	201.5	3.6
150°-160°	147.4	2.6
160°-170°	91.3	1.6
170°-180°	31.0	0.6
0°-30°	1575.1	28.0
0°-40°	2320.7	41.3
0°-60°	3271.6	58.3
0°-90°	3590.1	63.9
90°-120°	976.8	17.4
90°-150°	1756.4	31.3
90°-180°	2026.0	36.1
0°-180°	5616.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2464	2464	2464	2464	2464	
5°	2424	2399	2415	2421	2429	225
15°	2050	2042	2097	2154	2191	572
25°	1566	1571	1652	1724	1800	720
35°	1107	1112	1187	1267	1357	688
45°	664	676	721	776	846	518
55°	382	398	420	436	472	346
65°	191	207	226	197	180	199
75°	96	96	88	60	41	103
85°	27	27	25	16	10	29
90°	0	0	0	0	0	2
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

TEST NUMBER: P521735

CATALOG NUMBER: SQ4-WB-025U-100D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2463.7	2463.7	2463.7	2463.7	2463.7
2.5°	2469.8	2447.8	2453.3	2453.2	2446.4
5°	2423.7	2399.4	2415.1	2420.7	2429.1
7.5°	2333.8	2315.4	2343.9	2365.1	2382.2
10°	2263.7	2247.9	2284.3	2315.0	2337.2
12.5°	2182.4	2169.1	2214.2	2255.5	2284.5
15°	2049.7	2042.3	2097.2	2154.3	2191.3
17.5°	1907.6	1904.0	1967.1	2033.7	2081.0
20°	1810.8	1809.7	1878.9	1948.2	2003.2
22.5°	1713.0	1715.4	1788.1	1860.2	1922.8
25°	1566.4	1570.7	1651.8	1723.8	1800.0
27.5°	1430.9	1432.8	1516.7	1592.7	1673.9
30°	1338.3	1343.6	1425.9	1504.6	1589.1
32.5°	1245.8	1251.9	1332.5	1413.8	1500.1
35°	1107.0	1112.3	1187.0	1266.9	1356.7
37.5°	963.9	971.1	1037.4	1112.9	1201.3
40°	871.3	881.9	940.5	1011.7	1098.3
42.5°	782.2	795.4	849.7	917.2	995.4
45°	663.8	676.4	721.1	775.6	846.5
47.5°	561.7	576.3	610.6	657.6	718.0
50°	503.8	517.5	549.2	584.0	641.1
52.5°	452.7	466.5	494.7	521.5	570.1
55°	381.6	397.5	420.5	436.5	472.4
57.5°	323.2	338.5	356.7	363.9	385.7
60°	284.3	301.2	317.8	317.0	328.6
62.5°	248.9	263.2	279.8	268.3	269.0
65°	191.3	207.2	225.9	197.4	179.5
67.5°	154.6	158.0	177.3	137.7	116.3
70°	137.3	137.3	142.7	106.6	88.6
72.5°	120.9	120.9	115.9	86.7	67.9
75°	96.2	96.2	87.6	60.1	41.1
77.5°	74.2	73.3	67.0	44.8	29.8
80°	59.5	59.5	54.1	35.4	23.8
82.5°	46.5	46.5	41.9	27.7	17.7
85°	27.0	27.0	24.9	16.1	9.7
87.5°	9.5	9.5	8.6	5.2	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

TEST NUMBER: P521735

CATALOG NUMBER: SQ4-WB-025U-100D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)