

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: P521737

Luminaire Tested: SQ4-WB-025U-100D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521737  
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\_6500K  
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 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5750.3 lumens  
Efficiency: N/A  
Efficacy: 102.7 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

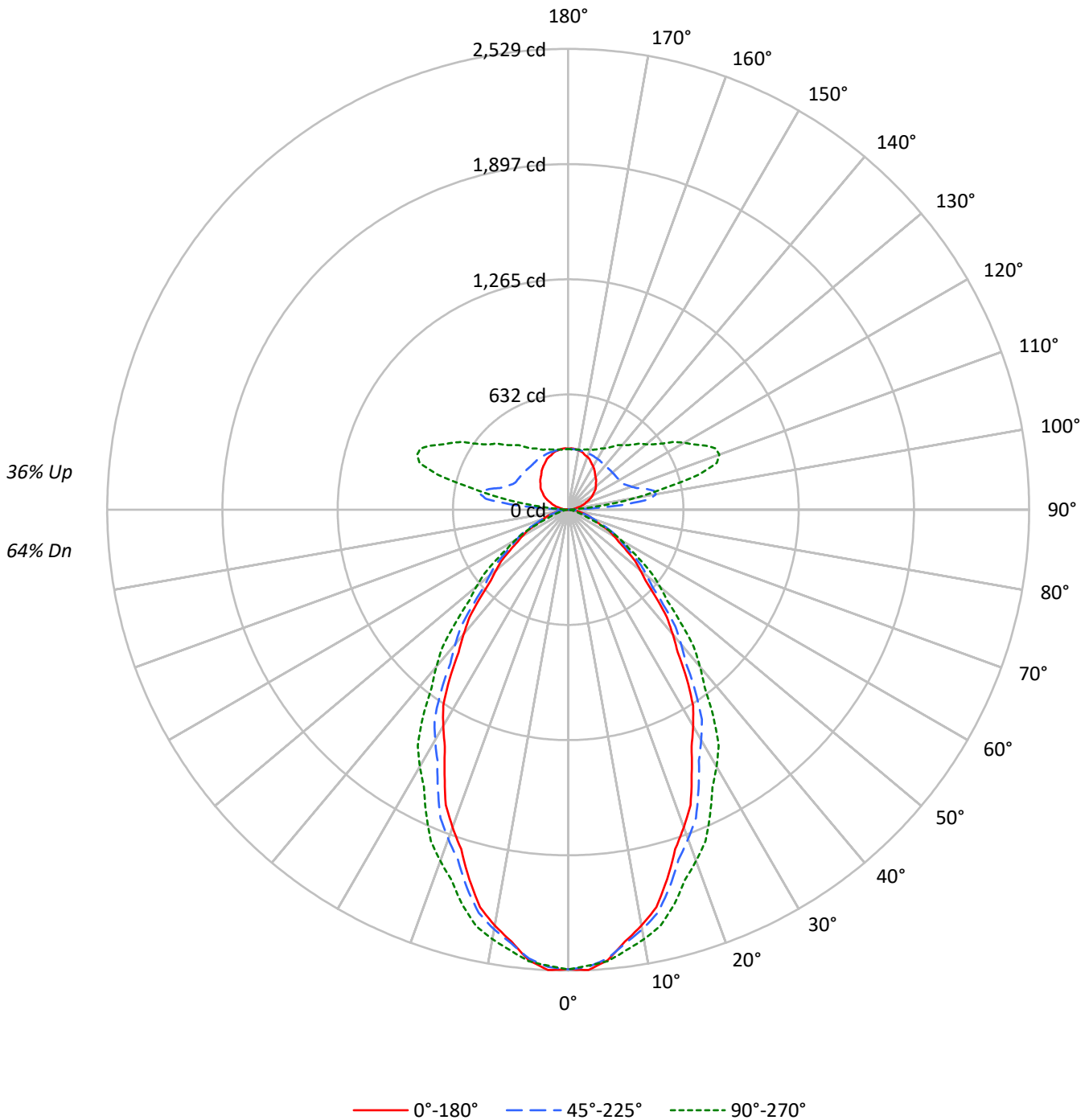
Input Watts (W): 56  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	23273	23273	23273
5°	22982	22901	23034
10°	21713	21911	22419
15°	20045	20510	21430
20°	18203	18888	20137
25°	16327	17217	18761
30°	14598	15553	17334
35°	12766	13688	15646
40°	10744	11598	13545
45°	8867	9633	11309
50°	7403	8071	9422
55°	6285	6926	7781
60°	5371	6004	6209
65°	4277	5050	4010
70°	3793	3941	2449
75°	3511	3198	1501
80°	3236	2938	1296
85°	2932	2699	1059

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11309 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.4	4.0
10°-20°	601.8	10.5
20°-30°	779.5	13.6
30°-40°	763.3	13.3
40°-50°	584.3	10.2
50°-60°	389.4	6.8
60°-70°	212.5	3.7
70°-80°	88.5	1.5
80°-90°	25.1	0.4
90°-100°	152.2	2.6
100°-110°	433.0	7.5
110°-120°	414.9	7.2
120°-130°	328.4	5.7
130°-140°	263.6	4.6
140°-150°	206.3	3.6
150°-160°	151.0	2.6
160°-170°	93.5	1.6
170°-180°	31.7	0.6
0°-30°	1612.7	28.0
0°-40°	2376.0	41.3
0°-60°	3349.7	58.3
0°-90°	3675.8	63.9
90°-120°	1000.1	17.4
90°-150°	1798.3	31.3
90°-180°	2075.0	36.1
0°-180°	5750.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2522	2522	2522	2522	2522	
5°	2482	2457	2473	2478	2487	231
15°	2099	2091	2147	2206	2244	586
25°	1604	1608	1691	1765	1843	738
35°	1133	1139	1215	1297	1389	705
45°	680	693	738	794	867	530
55°	391	407	431	447	484	354
65°	196	212	231	202	184	204
75°	98	98	90	62	42	105
85°	28	28	26	16	10	30
90°	0	0	0	0	0	2
95°	16	66	295	102	63	19
105°	67	102	441	779	741	71
115°	125	151	335	709	832	123
125°	176	196	319	530	634	158
135°	216	234	316	448	506	167
145°	255	268	318	388	422	159
155°	291	298	326	350	364	134
165°	321	322	330	337	342	90
175°	336	335	333	331	329	32
180°	334	334	334	334	334	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2522.5	2522.5	2522.5	2522.5	2522.5
2.5°	2528.7	2506.2	2511.9	2511.7	2504.8
5°	2481.5	2456.7	2472.7	2478.4	2487.1
7.5°	2389.5	2370.6	2399.9	2421.5	2439.0
10°	2317.7	2301.5	2338.8	2370.3	2393.0
12.5°	2234.5	2220.9	2267.0	2309.3	2339.0
15°	2098.6	2091.0	2147.3	2205.7	2243.6
17.5°	1953.1	1949.5	2014.0	2082.2	2130.7
20°	1854.0	1852.9	1923.7	1994.7	2051.0
22.5°	1753.9	1756.3	1830.7	1904.6	1968.6
25°	1603.8	1608.1	1691.3	1765.0	1842.9
27.5°	1465.0	1467.0	1552.9	1630.7	1713.8
30°	1370.3	1375.7	1459.9	1540.5	1627.1
32.5°	1275.5	1281.8	1364.3	1447.5	1535.9
35°	1133.4	1138.8	1215.3	1297.1	1389.1
37.5°	986.9	994.2	1062.1	1139.5	1229.9
40°	892.1	902.9	963.0	1035.8	1124.6
42.5°	800.9	814.3	870.0	939.1	1019.2
45°	679.6	692.6	738.3	794.2	866.7
47.5°	575.1	590.1	625.1	673.3	735.2
50°	515.8	529.9	562.3	597.9	656.4
52.5°	463.5	477.6	506.5	534.0	583.8
55°	390.7	407.0	430.6	446.9	483.7
57.5°	330.9	346.5	365.3	372.6	394.9
60°	291.1	308.4	325.4	324.6	336.5
62.5°	254.8	269.5	286.5	274.7	275.4
65°	195.9	212.1	231.3	202.1	183.7
67.5°	158.3	161.7	181.5	141.0	119.1
70°	140.6	140.6	146.1	109.2	90.8
72.5°	123.7	123.7	118.7	88.8	69.5
75°	98.5	98.5	89.7	61.5	42.1
77.5°	75.9	75.1	68.6	45.9	30.5
80°	60.9	60.9	55.3	36.3	24.4
82.5°	47.6	47.6	42.9	28.3	18.2
85°	27.7	27.7	25.5	16.5	10.0
87.5°	9.7	9.7	8.9	5.3	4.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.1	26.9	62.5	18.2	13.7
95°	16.5	65.6	294.6	102.0	62.9
97.5°	30.3	76.8	453.7	324.7	222.5
100°	40.0	83.5	488.3	494.6	381.0
102.5°	50.7	90.6	480.6	633.0	533.8
105°	67.3	102.1	441.3	779.4	740.9
107.5°	84.2	115.4	395.3	820.7	855.0
110°	95.9	125.1	368.9	804.9	881.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	107.0	134.7	351.1	767.6	877.3
115°	125.1	151.2	334.6	708.8	832.4
117.5°	141.0	165.4	324.8	644.6	775.5
120°	153.7	174.1	323.8	607.9	733.3
122.5°	163.8	184.3	321.3	575.7	692.2
125°	176.5	195.8	319.4	530.0	633.6
127.5°	190.3	208.4	318.3	502.6	588.1
130°	197.5	215.5	316.8	483.6	558.1
132.5°	205.1	222.6	316.8	468.7	537.3
135°	215.9	233.9	315.6	447.7	506.0
137.5°	226.0	243.5	315.4	429.8	480.3
140°	233.7	251.7	314.9	415.1	463.5
142.5°	242.3	257.3	316.4	403.3	446.7
145°	254.6	267.6	318.1	387.5	422.2
147.5°	265.1	277.8	320.9	371.5	401.5
150°	274.3	283.0	321.9	366.2	387.3
152.5°	281.4	290.6	322.9	359.0	378.7
155°	290.8	297.6	325.7	350.2	364.4
157.5°	302.5	306.6	326.3	346.1	356.3
160°	308.6	311.7	328.9	343.1	351.7
162.5°	312.1	315.7	329.4	340.5	347.2
165°	321.3	322.5	329.5	336.6	341.6
167.5°	327.5	326.4	332.4	335.7	337.6
170°	329.5	328.9	331.4	332.1	334.6
172.5°	334.1	332.0	333.0	331.1	333.1
175°	336.5	334.6	333.3	331.4	328.9
177.5°	337.5	334.5	333.0	330.9	331.4
180°	334.0	334.0	334.0	334.0	334.0

(END OF REPORT)