

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: P521945

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521945  
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-100U-100D-92765-1D-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 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: 8359.3 lumens  
Efficiency: N/A  
Efficacy: 112.5 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: General Diffuse

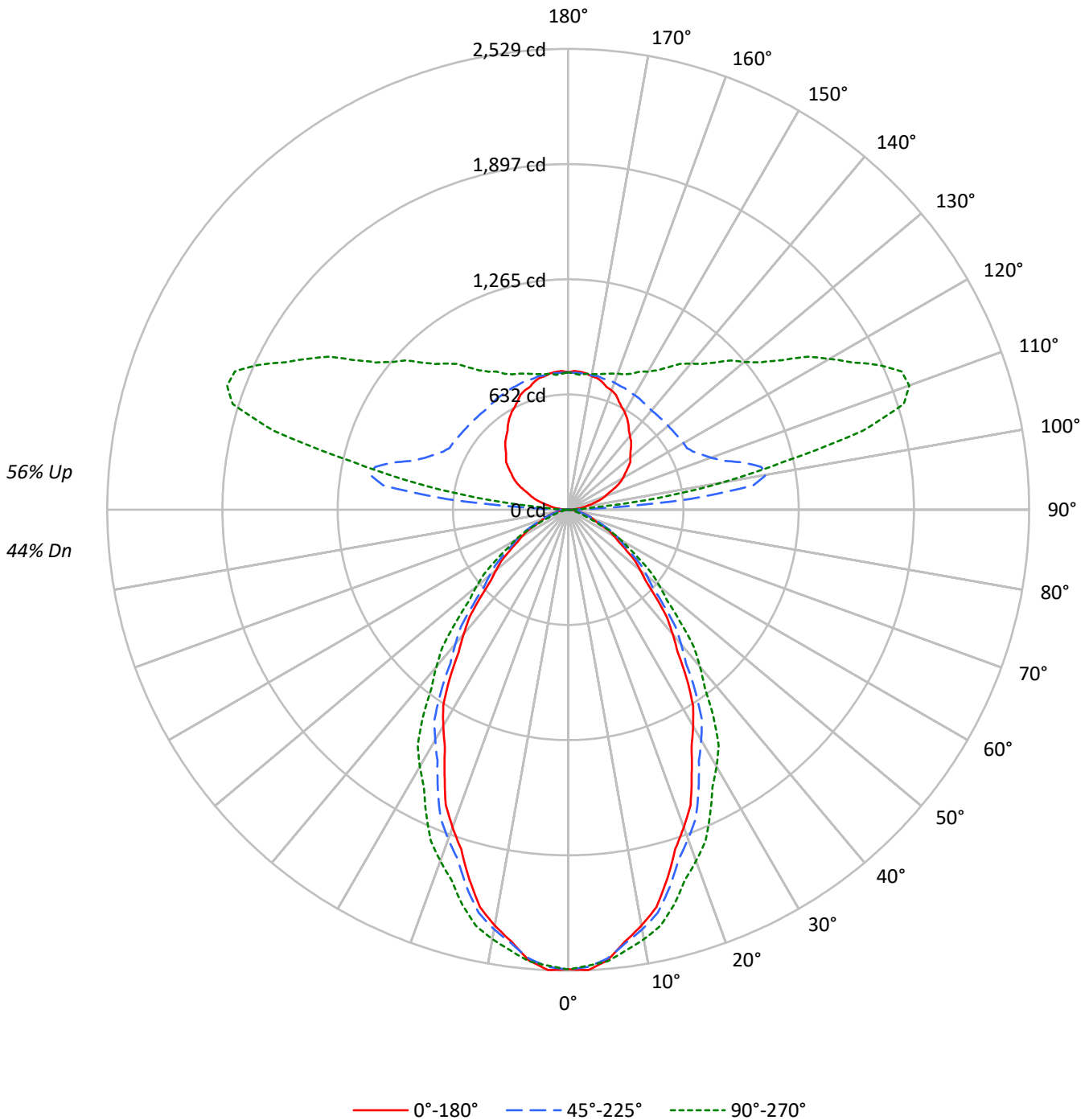
Input Watts (W): 74.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	97	94	90	87	89	86	83	80	72	70	68	58	57	56	46	45	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	39	34				
3	82	74	67	62	75	68	62	58	57	53	50	47	44	42	38	36	35	30				
4	76	66	59	53	69	61	55	50	52	47	43	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	48	44	47	42	38	39	36	33	32	30	28	24				
6	65	54	46	41	60	50	43	38	43	38	34	36	32	29	29	27	25	22				
7	60	49	41	36	55	45	39	34	39	34	30	33	29	26	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	30	27	24	25	23	21	18				
9	52	41	34	29	48	38	32	28	33	28	25	28	24	22	24	21	19	17				
10	49	38	31	26	45	35	29	25	31	26	23	26	23	20	22	19	17	15				

**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	2.8
10°-20°	601.8	7.2
20°-30°	779.5	9.3
30°-40°	763.3	9.1
40°-50°	584.3	7.0
50°-60°	389.4	4.7
60°-70°	212.5	2.5
70°-80°	88.5	1.1
80°-90°	25.1	0.3
90°-100°	343.6	4.1
100°-110°	977.6	11.7
110°-120°	936.6	11.2
120°-130°	741.3	8.9
130°-140°	595.0	7.1
140°-150°	465.8	5.6
150°-160°	340.8	4.1
160°-170°	211.1	2.5
170°-180°	71.6	0.9
0°-30°	1612.7	19.3
0°-40°	2376.0	28.4
0°-60°	3349.7	40.1
0°-90°	3675.8	44.0
90°-120°	2257.8	27.0
90°-150°	4059.9	48.6
90°-180°	4684.0	56.0
0°-180°	8359.3	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	3
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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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°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)