

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: P521919

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521919  
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-050D-92765-1D-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 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: 6550.6 lumens  
Efficiency: N/A  
Efficacy: 124.3 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

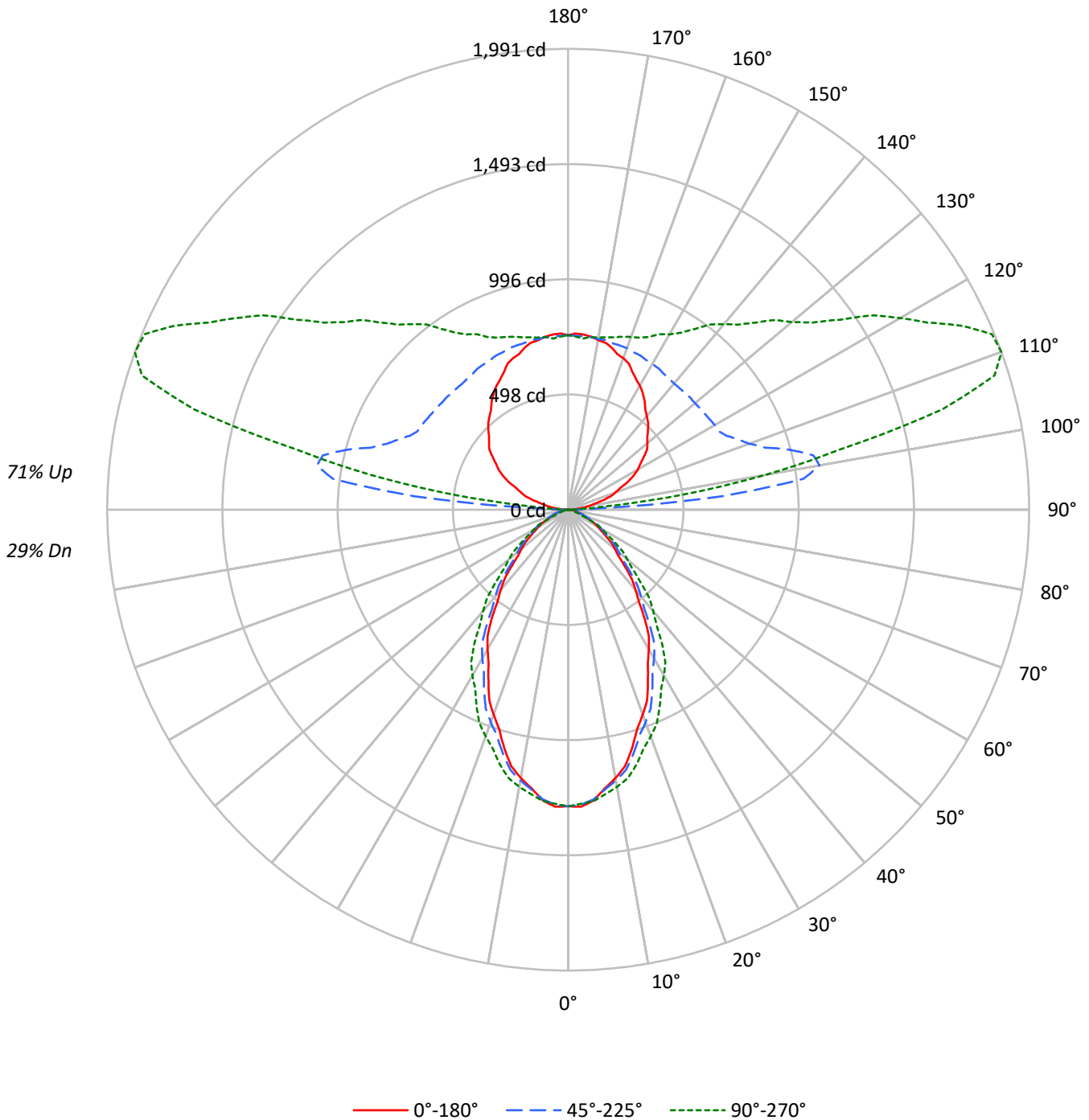
Input Watts (W): 52.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71		53	53	53		36	36	36	29
1	94	90	86	83	84	81	78	75	63	61	60		48	46	45		33	32	32	25
2	86	79	74	69	77	71	67	63	56	53	50		43	41	39		30	29	28	22
3	79	70	63	58	70	63	58	53	50	46	43		38	36	34		27	26	25	20
4	72	62	55	50	65	56	50	45	45	41	37		35	32	29		25	23	22	18
5	66	56	48	43	60	51	44	39	41	36	33		31	28	26		23	21	19	16
6	61	50	43	37	55	46	39	34	37	32	29		28	25	23		21	19	17	14
7	57	45	38	33	51	41	35	30	33	29	25		26	23	21		19	17	16	13
8	53	41	34	29	47	38	31	27	31	26	23		24	21	19		18	16	14	12
9	49	38	31	26	44	34	28	24	28	24	20		22	19	17		17	15	13	11
10	46	35	28	23	41	32	26	22	26	22	19		21	17	15		15	13	12	10

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

	0°	45°	90°
0°	11822	11822	11822
5°	11674	11632	11700
10°	11030	11130	11387
15°	10182	10418	10885
20°	9246	9593	10229
25°	8293	8746	9529
30°	7415	7901	8804
35°	6484	6953	7947
40°	5457	5891	6880
45°	4504	4893	5744
50°	3761	4099	4785
55°	3193	3518	3952
60°	2729	3050	3154
65°	2172	2565	2037
70°	1926	2002	1244
75°	1782	1622	763
80°	1642	1493	659
85°	1493	1366	540

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5744 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.5	1.8
10°-20°	305.7	4.7
20°-30°	395.9	6.0
30°-40°	387.7	5.9
40°-50°	296.8	4.5
50°-60°	197.8	3.0
60°-70°	107.9	1.6
70°-80°	45.0	0.7
80°-90°	12.7	0.2
90°-100°	343.6	5.2
100°-110°	977.6	14.9
110°-120°	936.6	14.3
120°-130°	741.3	11.3
130°-140°	595.0	9.1
140°-150°	465.8	7.1
150°-160°	340.8	5.2
160°-170°	211.1	3.2
170°-180°	71.6	1.1
0°-30°	819.2	12.5
0°-40°	1206.9	18.4
0°-60°	1701.4	26.0
0°-90°	1867.1	28.5
90°-120°	2257.8	34.5
90°-150°	4059.9	62.0
90°-180°	4684.0	71.5
0°-180°	6550.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1260	1248	1256	1259	1263	117
15°	1066	1062	1091	1120	1140	298
25°	815	817	859	896	936	375
35°	576	578	617	659	706	358
45°	345	352	375	403	440	269
55°	198	207	219	227	246	180
65°	100	108	118	103	93	103
75°	50	50	46	31	21	53
85°	14	14	13	8	5	15
90°	0	0	0	0	0	2
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°	1281.3	1281.3	1281.3	1281.3	1281.3
2.5°	1284.4	1273.0	1275.9	1275.8	1272.3
5°	1260.5	1247.8	1256.0	1258.9	1263.3
7.5°	1213.7	1204.1	1219.0	1230.0	1238.9
10°	1177.3	1169.0	1188.0	1204.0	1215.5
12.5°	1135.0	1128.1	1151.5	1173.0	1188.1
15°	1066.0	1062.1	1090.7	1120.4	1139.6
17.5°	992.1	990.2	1023.0	1057.6	1082.3
20°	941.7	941.2	977.1	1013.2	1041.8
22.5°	890.9	892.1	929.9	967.4	999.9
25°	814.6	816.8	859.1	896.5	936.1
27.5°	744.1	745.1	788.8	828.3	870.5
30°	696.0	698.8	741.6	782.5	826.4
32.5°	647.9	651.1	693.0	735.3	780.1
35°	575.7	578.5	617.3	658.8	705.6
37.5°	501.3	505.0	539.5	578.8	624.7
40°	453.1	458.6	489.1	526.1	571.2
42.5°	406.8	413.6	441.9	477.0	517.7
45°	345.2	351.8	375.0	403.4	440.2
47.5°	292.1	299.7	317.5	342.0	373.4
50°	262.0	269.1	285.6	303.7	333.4
52.5°	235.5	242.6	257.3	271.2	296.5
55°	198.5	206.7	218.7	227.0	245.7
57.5°	168.1	176.0	185.5	189.3	200.6
60°	147.9	156.7	165.3	164.9	170.9
62.5°	129.4	136.9	145.5	139.5	139.9
65°	99.5	107.8	117.5	102.7	93.3
67.5°	80.4	82.2	92.2	71.6	60.5
70°	71.4	71.4	74.2	55.4	46.1
72.5°	62.9	62.9	60.3	45.1	35.3
75°	50.0	50.0	45.5	31.3	21.4
77.5°	38.6	38.1	34.9	23.3	15.5
80°	30.9	30.9	28.1	18.4	12.4
82.5°	24.2	24.2	21.8	14.4	9.2
85°	14.1	14.1	12.9	8.4	5.1
87.5°	4.9	4.9	4.5	2.7	2.2
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)