

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: P521915

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521915  
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\_4000K  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6227.5 lumens  
Efficiency: N/A  
Efficacy: 117.3 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

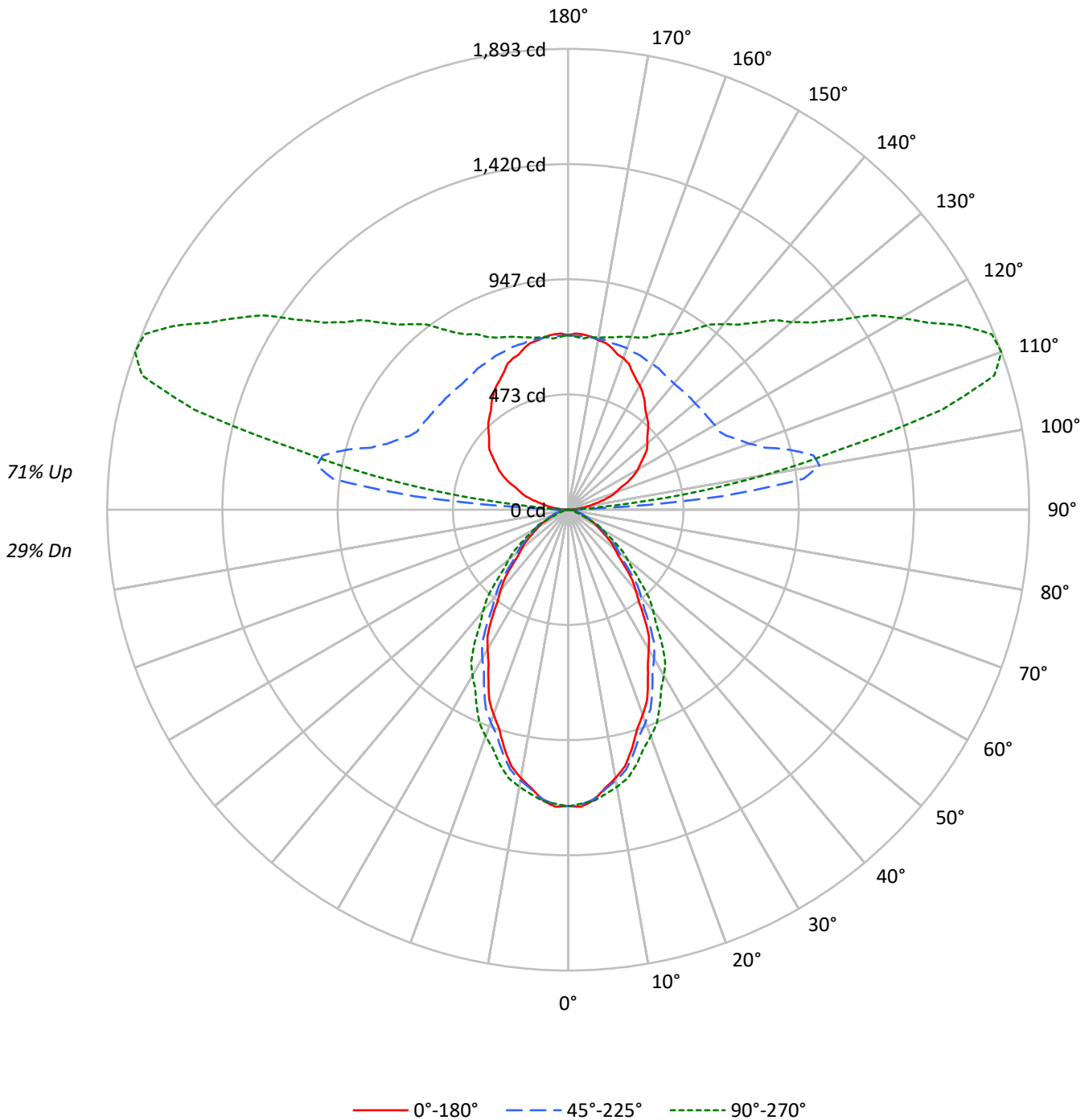
Input Watts (W): 53.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	11238	11238	11238
5°	11098	11058	11123
10°	10485	10580	10825
15°	9680	9904	10348
20°	8789	9120	9724
25°	7884	8314	9059
30°	7049	7511	8370
35°	6164	6610	7555
40°	5189	5600	6540
45°	4282	4652	5461
50°	3575	3897	4549
55°	3035	3344	3758
60°	2594	2899	2999
65°	2065	2439	1936
70°	1832	1904	1182
75°	1697	1544	724
80°	1562	1419	627
85°	1419	1302	508

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5461 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	1.8
10°-20°	290.6	4.7
20°-30°	376.4	6.0
30°-40°	368.6	5.9
40°-50°	282.1	4.5
50°-60°	188.0	3.0
60°-70°	102.6	1.6
70°-80°	42.8	0.7
80°-90°	12.1	0.2
90°-100°	326.6	5.2
100°-110°	929.4	14.9
110°-120°	890.4	14.3
120°-130°	704.7	11.3
130°-140°	565.7	9.1
140°-150°	442.8	7.1
150°-160°	324.0	5.2
160°-170°	200.7	3.2
170°-180°	68.1	1.1
0°-30°	778.7	12.5
0°-40°	1147.4	18.4
0°-60°	1617.5	26.0
0°-90°	1775.0	28.5
90°-120°	2146.4	34.5
90°-150°	3859.7	62.0
90°-180°	4453.0	71.5
0°-180°	6227.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1198	1186	1194	1197	1201	111
15°	1013	1010	1037	1065	1083	283
25°	774	776	817	852	890	356
35°	547	550	587	626	671	340
45°	328	334	356	384	418	256
55°	189	196	208	216	234	171
65°	95	102	112	98	89	98
75°	48	48	43	30	20	51
85°	13	13	12	8	5	15
90°	0	0	0	0	0	2
95°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1221.1	1210.2	1212.9	1212.9	1209.5
5°	1198.3	1186.3	1194.0	1196.8	1201.0
7.5°	1153.8	1144.7	1158.9	1169.3	1177.8
10°	1119.2	1111.4	1129.3	1144.6	1155.5
12.5°	1079.0	1072.4	1094.7	1115.1	1129.5
15°	1013.4	1009.7	1036.9	1065.1	1083.4
17.5°	943.1	941.4	972.5	1005.5	1028.9
20°	895.2	894.7	928.9	963.2	990.4
22.5°	846.9	848.1	884.0	919.7	950.6
25°	774.5	776.5	816.7	852.3	889.9
27.5°	707.4	708.4	749.9	787.4	827.6
30°	661.7	664.3	705.0	743.9	785.7
32.5°	615.9	619.0	658.8	699.0	741.6
35°	547.3	549.9	586.9	626.3	670.8
37.5°	476.5	480.1	512.9	550.2	593.9
40°	430.8	436.0	465.0	500.2	543.0
42.5°	386.7	393.2	420.1	453.5	492.1
45°	328.2	334.4	356.5	383.5	418.5
47.5°	277.7	284.9	301.9	325.1	355.0
50°	249.1	255.9	271.5	288.7	316.9
52.5°	223.8	230.6	244.6	257.8	281.9
55°	188.7	196.5	207.9	215.8	233.6
57.5°	159.8	167.3	176.4	179.9	190.7
60°	140.6	148.9	157.1	156.7	162.5
62.5°	123.0	130.1	138.3	132.7	133.0
65°	94.6	102.4	111.7	97.6	88.7
67.5°	76.4	78.1	87.7	68.1	57.5
70°	67.9	67.9	70.6	52.7	43.8
72.5°	59.8	59.8	57.3	42.9	33.6
75°	47.6	47.6	43.3	29.7	20.3
77.5°	36.7	36.2	33.1	22.2	14.8
80°	29.4	29.4	26.7	17.5	11.8
82.5°	23.0	23.0	20.7	13.7	8.8
85°	13.4	13.4	12.3	7.9	4.8
87.5°	4.7	4.7	4.3	2.6	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)