

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: P521928

Luminaire Tested: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521928  
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-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 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: 7110.7 lumens  
Efficiency: N/A  
Efficacy: 110.6 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

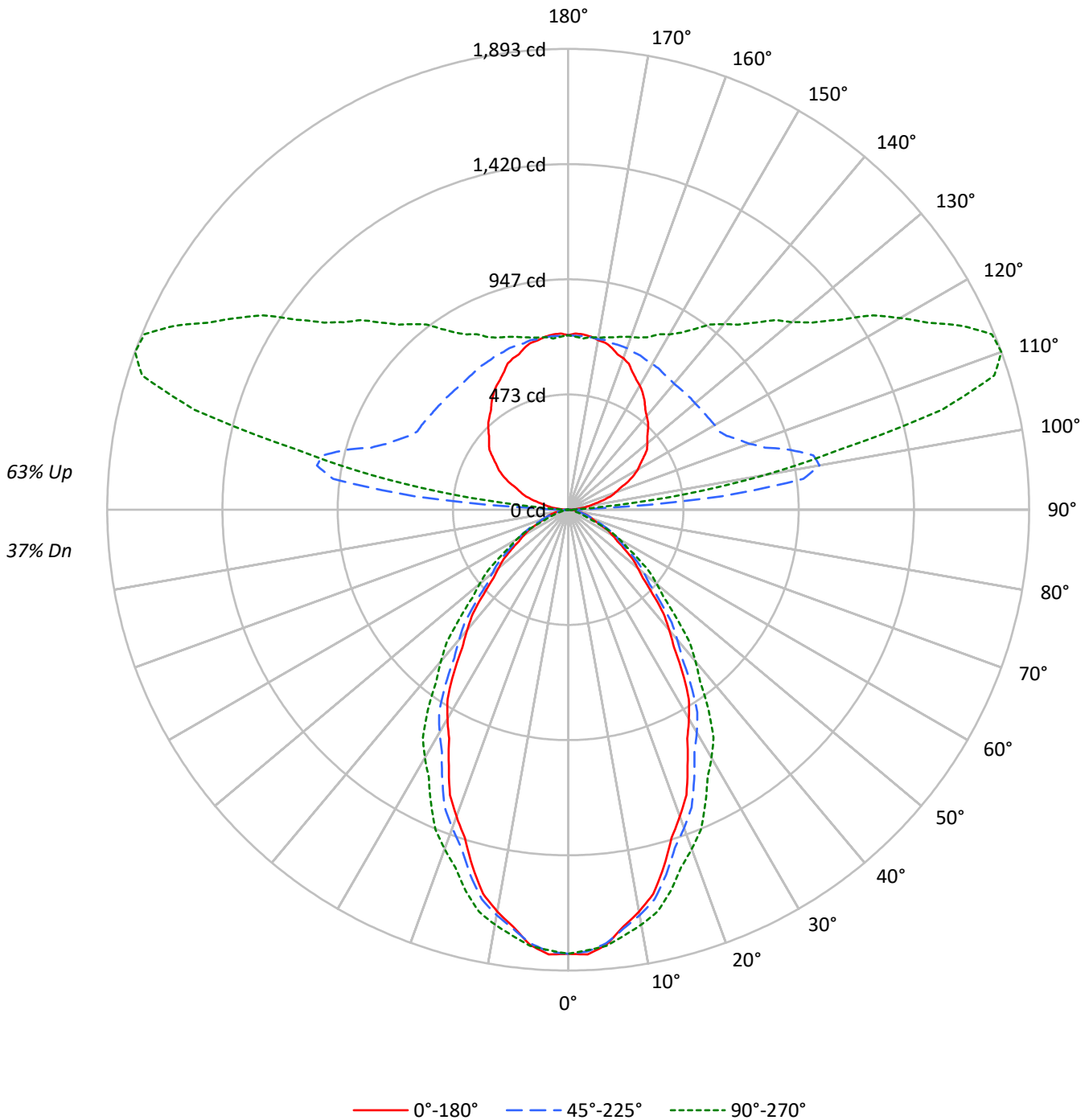
Input Watts (W): 64.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																				
0	104	104	104	104	94	94	94	94	76	76	76		60	60	60		45	45	45	37
1	96	92	88	85	87	84	81	78	68	66	64		54	53	51		41	40	39	33
2	88	81	76	71	80	74	69	65	61	57	55		48	46	44		37	36	34	29
3	81	72	66	60	73	66	60	56	54	50	47		44	41	39		33	32	30	26
4	74	64	57	52	67	59	53	48	49	44	41		39	36	34		31	29	27	23
5	69	58	50	45	62	53	47	42	44	39	36		36	32	30		28	26	24	21
6	63	52	45	39	58	48	42	37	40	35	32		33	29	27		26	23	22	19
7	59	47	40	35	53	44	37	33	37	32	28		30	27	24		24	21	20	17
8	55	43	36	31	50	40	34	29	34	29	25		28	24	22		22	20	18	16
9	51	40	33	28	47	37	30	26	31	26	23		26	22	20		21	18	16	14
10	48	36	30	25	44	34	28	24	29	24	21		24	20	18		19	17	15	13

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

	0°	45°	90°
0°	16830	16830	16830
5°	16621	16561	16658
10°	15703	15845	16213
15°	14497	14833	15498
20°	13164	13659	14563
25°	11808	12451	13567
30°	10558	11248	12536
35°	9232	9899	11315
40°	7771	8387	9795
45°	6413	6966	8178
50°	5354	5836	6814
55°	4546	5009	5627
60°	3884	4342	4489
65°	3093	3652	2901
70°	2743	2851	1770
75°	2538	2310	1084
80°	2338	2125	935
85°	2117	1948	762

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8178 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.3	2.4
10°-20°	435.2	6.1
20°-30°	563.7	7.9
30°-40°	552.0	7.8
40°-50°	422.6	5.9
50°-60°	281.6	4.0
60°-70°	153.7	2.2
70°-80°	64.0	0.9
80°-90°	18.1	0.3
90°-100°	326.6	4.6
100°-110°	929.4	13.1
110°-120°	890.4	12.5
120°-130°	704.7	9.9
130°-140°	565.7	8.0
140°-150°	442.8	6.2
150°-160°	324.0	4.6
160°-170°	200.7	2.8
170°-180°	68.1	1.0
0°-30°	1166.3	16.4
0°-40°	1718.3	24.2
0°-60°	2422.4	34.1
0°-90°	2658.2	37.4
90°-120°	2146.4	30.2
90°-150°	3859.7	54.3
90°-180°	4453.0	62.6
0°-180°	7110.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1824	1824	1824	1824	1824	
5°	1795	1777	1788	1792	1799	167
15°	1518	1512	1553	1595	1622	424
25°	1160	1163	1223	1276	1333	533
35°	820	824	879	938	1005	510
45°	492	501	534	574	627	383
55°	283	294	311	323	350	256
65°	142	153	167	146	133	147
75°	71	71	65	44	30	76
85°	20	20	18	12	7	22
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°	1824.2	1824.2	1824.2	1824.2	1824.2
2.5°	1828.7	1812.4	1816.5	1816.4	1811.4
5°	1794.6	1776.6	1788.2	1792.3	1798.6
7.5°	1728.0	1714.4	1735.5	1751.2	1763.9
10°	1676.1	1664.4	1691.3	1714.1	1730.6
12.5°	1615.9	1606.1	1639.5	1670.1	1691.5
15°	1517.7	1512.2	1552.9	1595.1	1622.5
17.5°	1412.5	1409.8	1456.5	1505.8	1540.9
20°	1340.8	1340.0	1391.2	1442.5	1483.2
22.5°	1268.4	1270.1	1323.9	1377.3	1423.7
25°	1159.9	1163.0	1223.1	1276.4	1332.7
27.5°	1059.5	1060.9	1123.0	1179.3	1239.4
30°	991.0	994.9	1055.8	1114.0	1176.7
32.5°	922.4	927.0	986.6	1046.8	1110.7
35°	819.7	823.6	878.9	938.0	1004.6
37.5°	713.7	719.0	768.1	824.0	889.5
40°	645.2	653.0	696.4	749.1	813.3
42.5°	579.2	588.9	629.2	679.1	737.1
45°	491.5	500.9	533.9	574.3	626.8
47.5°	415.9	426.7	452.1	486.9	531.7
50°	373.0	383.2	406.6	432.4	474.7
52.5°	335.2	345.4	366.3	386.2	422.2
55°	282.6	294.3	311.4	323.2	349.8
57.5°	239.3	250.6	264.1	269.5	285.6
60°	210.5	223.0	235.3	234.7	243.3
62.5°	184.3	194.9	207.2	198.7	199.2
65°	141.7	153.4	167.3	146.2	132.9
67.5°	114.5	117.0	131.3	101.9	86.1
70°	101.7	101.7	105.7	78.9	65.6
72.5°	89.5	89.5	85.8	64.2	50.3
75°	71.2	71.2	64.8	44.5	30.4
77.5°	54.9	54.3	49.6	33.2	22.1
80°	44.0	44.0	40.0	26.2	17.6
82.5°	34.4	34.4	31.1	20.5	13.1
85°	20.0	20.0	18.4	11.9	7.2
87.5°	7.0	7.0	6.4	3.8	3.2
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)