

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: P521772

Luminaire Tested: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521772  
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-050U-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 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: 4880.9 lumens  
Efficiency: N/A  
Efficacy: 102.3 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: General Diffuse

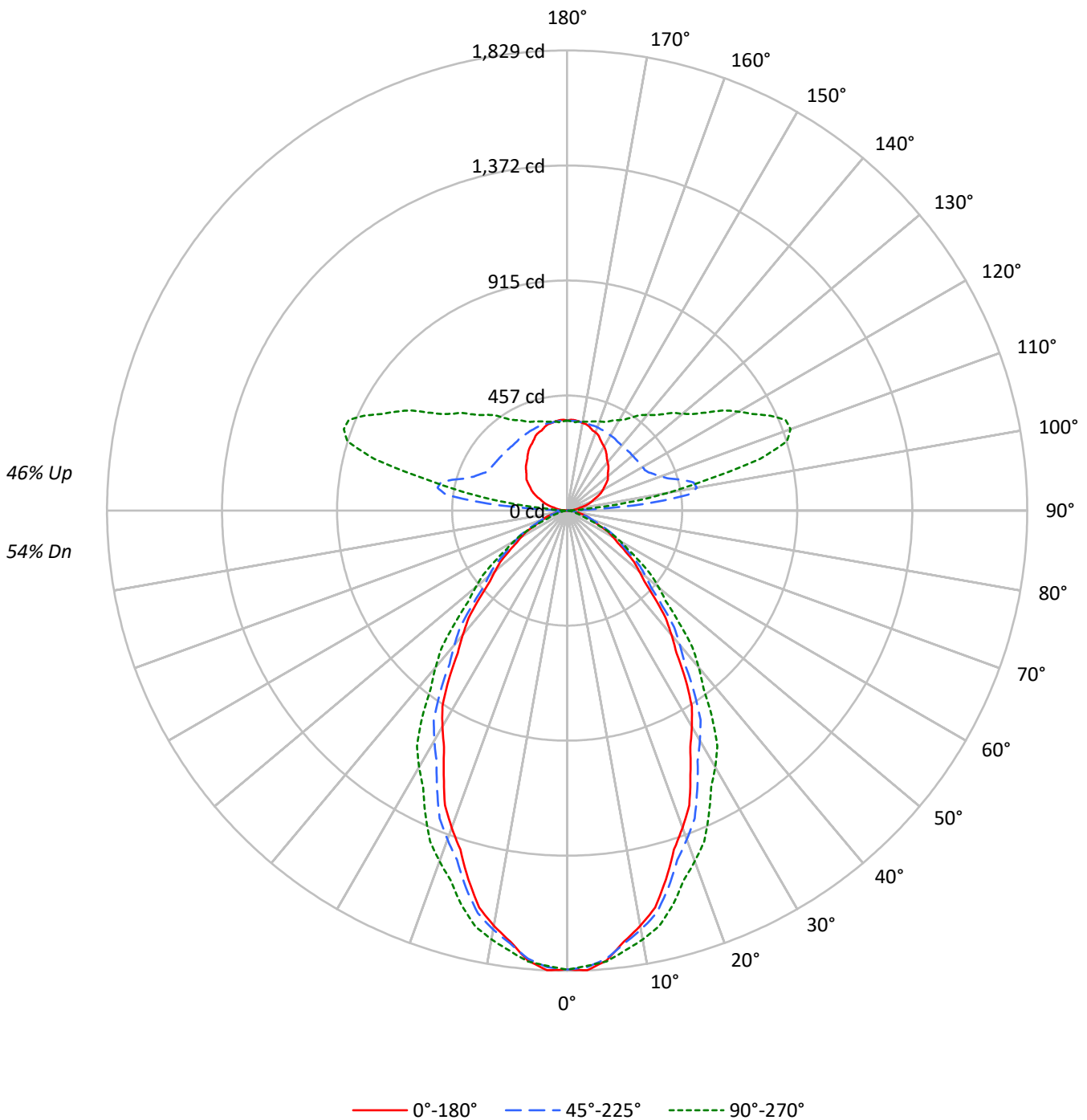
Input Watts (W): 47.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	86	86	86		72	72	72		60	60	60	54
1	100	96	93	90	93	90	87	84	77	75	73		66	64	63		55	54	53	48
2	92	85	80	75	85	80	75	71	69	66	63		59	57	55		50	48	47	43
3	85	76	70	64	79	71	66	61	62	58	54		54	50	48		46	43	41	38
4	78	69	61	56	73	64	58	53	56	51	47		49	45	42		42	39	37	34
5	73	62	54	49	67	58	51	46	51	46	42		44	41	37		38	35	33	30
6	67	56	49	43	63	53	46	41	47	41	37		41	37	34		35	32	30	27
7	63	51	44	38	58	48	42	37	43	37	34		38	33	30		33	30	27	25
8	58	47	40	35	54	44	38	33	39	34	30		35	31	28		30	27	25	23
9	55	43	36	31	51	41	34	30	36	31	28		32	28	25		28	25	23	21
10	51	40	33	28	48	38	32	27	34	29	25		30	26	23		26	23	21	19

**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	3.4
10°-20°	435.2	8.9
20°-30°	563.7	11.5
30°-40°	552.0	11.3
40°-50°	422.6	8.7
50°-60°	281.6	5.8
60°-70°	153.7	3.1
70°-80°	64.0	1.3
80°-90°	18.1	0.4
90°-100°	163.0	3.3
100°-110°	463.9	9.5
110°-120°	444.5	9.1
120°-130°	351.8	7.2
130°-140°	282.4	5.8
140°-150°	221.1	4.5
150°-160°	161.8	3.3
160°-170°	100.2	2.1
170°-180°	34.0	0.7
0°-30°	1166.3	23.9
0°-40°	1718.3	35.2
0°-60°	2422.4	49.6
0°-90°	2658.2	54.5
90°-120°	1071.5	22.0
90°-150°	1926.7	39.5
90°-180°	2223.0	45.5
0°-180°	4880.9	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°	18	70	316	109	67	20
105°	72	109	473	835	794	76
115°	134	162	358	760	892	132
125°	189	210	342	568	679	169
135°	231	251	338	480	542	178
145°	273	287	341	415	452	170
155°	312	319	349	375	390	144
165°	344	346	353	361	366	97
175°	360	358	357	355	352	34
180°	358	358	358	358	358	

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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°	5.4	28.9	66.9	19.5	14.7
95°	17.7	70.2	315.6	109.3	67.3
97.5°	32.5	82.3	486.1	347.8	238.4
100°	42.9	89.4	523.1	529.9	408.2
102.5°	54.3	97.1	515.0	678.3	572.0
105°	72.1	109.4	472.8	835.1	793.9
107.5°	90.2	123.6	423.5	879.3	916.0
110°	102.7	134.0	395.2	862.4	944.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	114.7	144.4	376.2	822.4	940.0
115°	134.0	161.9	358.5	759.5	891.8
117.5°	151.0	177.2	348.0	690.7	830.9
120°	164.6	186.6	346.9	651.3	785.7
122.5°	175.5	197.5	344.2	616.8	741.6
125°	189.1	209.7	342.2	567.8	678.9
127.5°	203.9	223.2	341.1	538.5	630.1
130°	211.6	230.9	339.5	518.1	598.0
132.5°	219.7	238.5	339.5	502.2	575.6
135°	231.3	250.6	338.1	479.6	542.2
137.5°	242.2	260.9	338.0	460.5	514.6
140°	250.3	269.6	337.4	444.7	496.6
142.5°	259.6	275.7	339.0	432.1	478.6
145°	272.8	286.8	340.8	415.1	452.4
147.5°	284.1	297.6	343.8	398.0	430.2
150°	293.9	303.2	344.9	392.3	415.0
152.5°	301.5	311.3	346.0	384.7	405.7
155°	311.6	318.9	349.0	375.2	390.5
157.5°	324.1	328.5	349.7	370.9	381.8
160°	330.6	333.9	352.4	367.6	376.9
162.5°	334.4	338.3	352.9	364.8	372.0
165°	344.2	345.5	353.1	360.7	366.0
167.5°	350.9	349.7	356.2	359.6	361.8
170°	353.1	352.4	355.1	355.8	358.5
172.5°	358.0	355.7	356.7	354.7	356.9
175°	360.5	358.5	357.1	355.0	352.4
177.5°	361.6	358.4	356.7	354.6	355.1
180°	357.8	357.8	357.8	357.8	357.8

(END OF REPORT)