

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: P521775

Luminaire Tested: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521775
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5085.9 lumens
Efficiency: N/A
Efficacy: 106.8 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

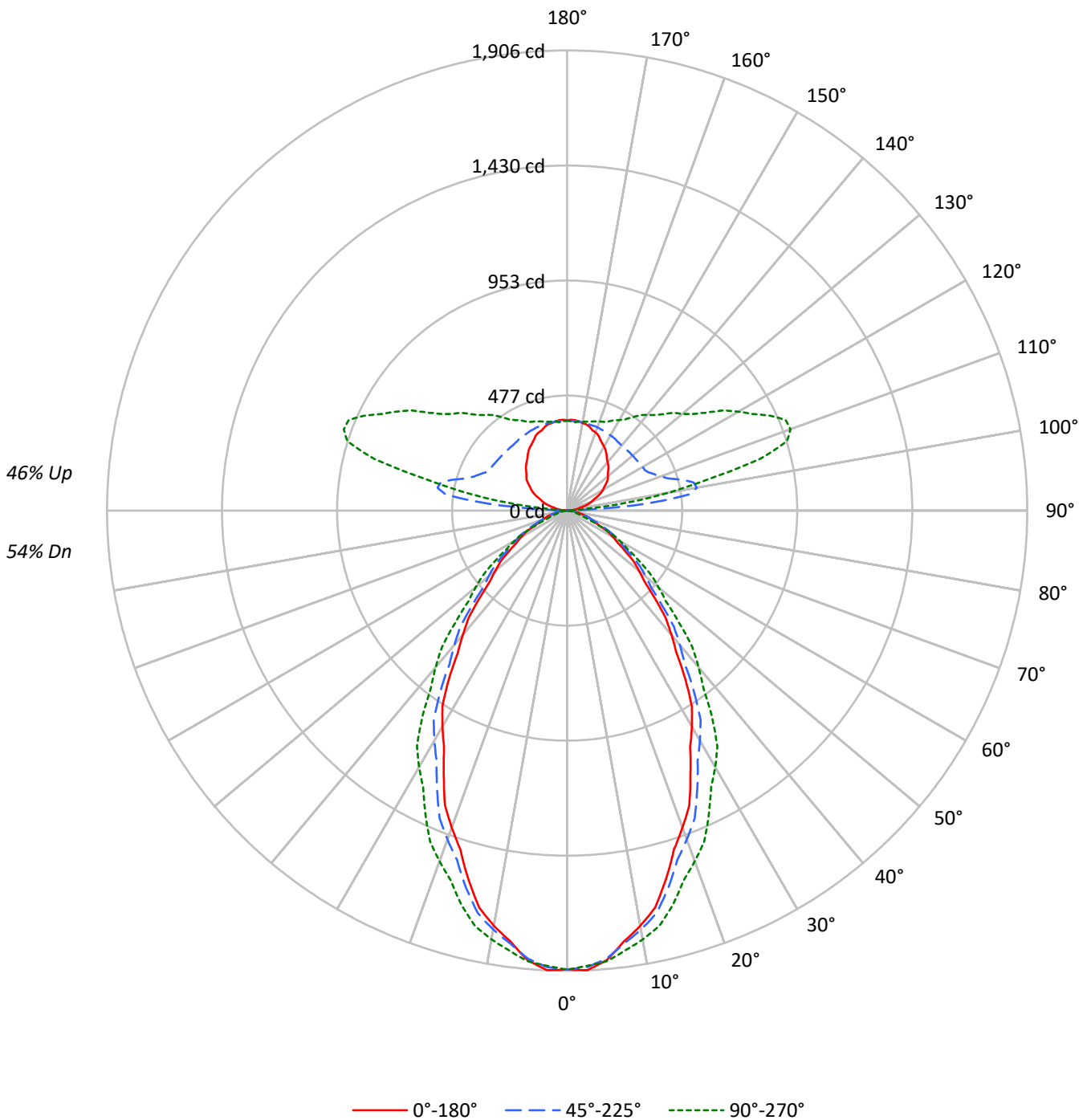
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	17538	17538	17538
5°	17319	17257	17358
10°	16363	16511	16894
15°	15105	15456	16149
20°	13717	14233	15174
25°	12304	12974	14137
30°	11001	11720	13062
35°	9620	10315	11790
40°	8097	8739	10206
45°	6682	7259	8522
50°	5579	6082	7099
55°	4736	5220	5863
60°	4048	4525	4680
65°	3222	3805	3024
70°	2857	2970	1845
75°	2645	2410	1130
80°	2439	2216	972
85°	2212	2032	794

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8522 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	3.4
10°-20°	453.5	8.9
20°-30°	587.4	11.5
30°-40°	575.2	11.3
40°-50°	440.3	8.7
50°-60°	293.4	5.8
60°-70°	160.1	3.1
70°-80°	66.7	1.3
80°-90°	18.9	0.4
90°-100°	169.9	3.3
100°-110°	483.4	9.5
110°-120°	463.2	9.1
120°-130°	366.6	7.2
130°-140°	294.2	5.8
140°-150°	230.4	4.5
150°-160°	168.5	3.3
160°-170°	104.4	2.1
170°-180°	35.4	0.7
0°-30°	1215.3	23.9
0°-40°	1790.5	35.2
0°-60°	2524.2	49.6
0°-90°	2769.9	54.5
90°-120°	1116.5	22.0
90°-150°	2007.7	39.5
90°-180°	2316.0	45.5
0°-180°	5085.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1901	1901	1901	1901	1901	
5°	1870	1851	1863	1868	1874	174
15°	1581	1576	1618	1662	1691	442
25°	1209	1212	1274	1330	1389	556
35°	854	858	916	977	1047	531
45°	512	522	556	598	653	399
55°	294	307	324	337	364	267
65°	148	160	174	152	138	153
75°	74	74	68	46	32	79
85°	21	21	19	12	8	23
90°	0	0	0	0	0	2
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1900.9	1900.9	1900.9	1900.9	1900.9
2.5°	1905.5	1888.6	1892.8	1892.7	1887.5
5°	1870.0	1851.2	1863.3	1867.6	1874.2
7.5°	1800.6	1786.4	1808.4	1824.8	1838.0
10°	1746.6	1734.3	1762.4	1786.1	1803.3
12.5°	1683.8	1673.6	1708.4	1740.2	1762.6
15°	1581.4	1575.7	1618.1	1662.1	1690.7
17.5°	1471.8	1469.0	1517.7	1569.1	1605.6
20°	1397.1	1396.3	1449.6	1503.1	1545.5
22.5°	1321.7	1323.5	1379.6	1435.2	1483.5
25°	1208.6	1211.8	1274.5	1330.0	1388.7
27.5°	1104.0	1105.4	1170.2	1228.8	1291.5
30°	1032.6	1036.7	1100.1	1160.8	1226.1
32.5°	961.2	965.9	1028.1	1090.8	1157.4
35°	854.1	858.2	915.8	977.4	1046.8
37.5°	743.7	749.2	800.4	858.6	926.8
40°	672.3	680.4	725.6	780.5	847.4
42.5°	603.5	613.6	655.6	707.7	768.0
45°	512.1	521.9	556.3	598.4	653.1
47.5°	433.4	444.6	471.1	507.3	554.0
50°	388.7	399.3	423.7	450.6	494.6
52.5°	349.3	359.9	381.7	402.4	439.9
55°	294.4	306.7	324.5	336.8	364.5
57.5°	249.4	261.1	275.2	280.8	297.6
60°	219.4	232.4	245.2	244.6	253.6
62.5°	192.0	203.1	215.9	207.0	207.5
65°	147.6	159.9	174.3	152.3	138.5
67.5°	119.3	121.9	136.8	106.2	89.7
70°	105.9	105.9	110.1	82.3	68.4
72.5°	93.2	93.2	89.4	66.9	52.4
75°	74.2	74.2	67.6	46.4	31.7
77.5°	57.2	56.6	51.7	34.6	23.0
80°	45.9	45.9	41.7	27.3	18.3
82.5°	35.9	35.9	32.4	21.3	13.7
85°	20.9	20.9	19.2	12.4	7.5
87.5°	7.3	7.3	6.7	4.0	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)