

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: P521774

Luminaire Tested: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521774
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5014.5 lumens
Efficiency: N/A
Efficacy: 105.3 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

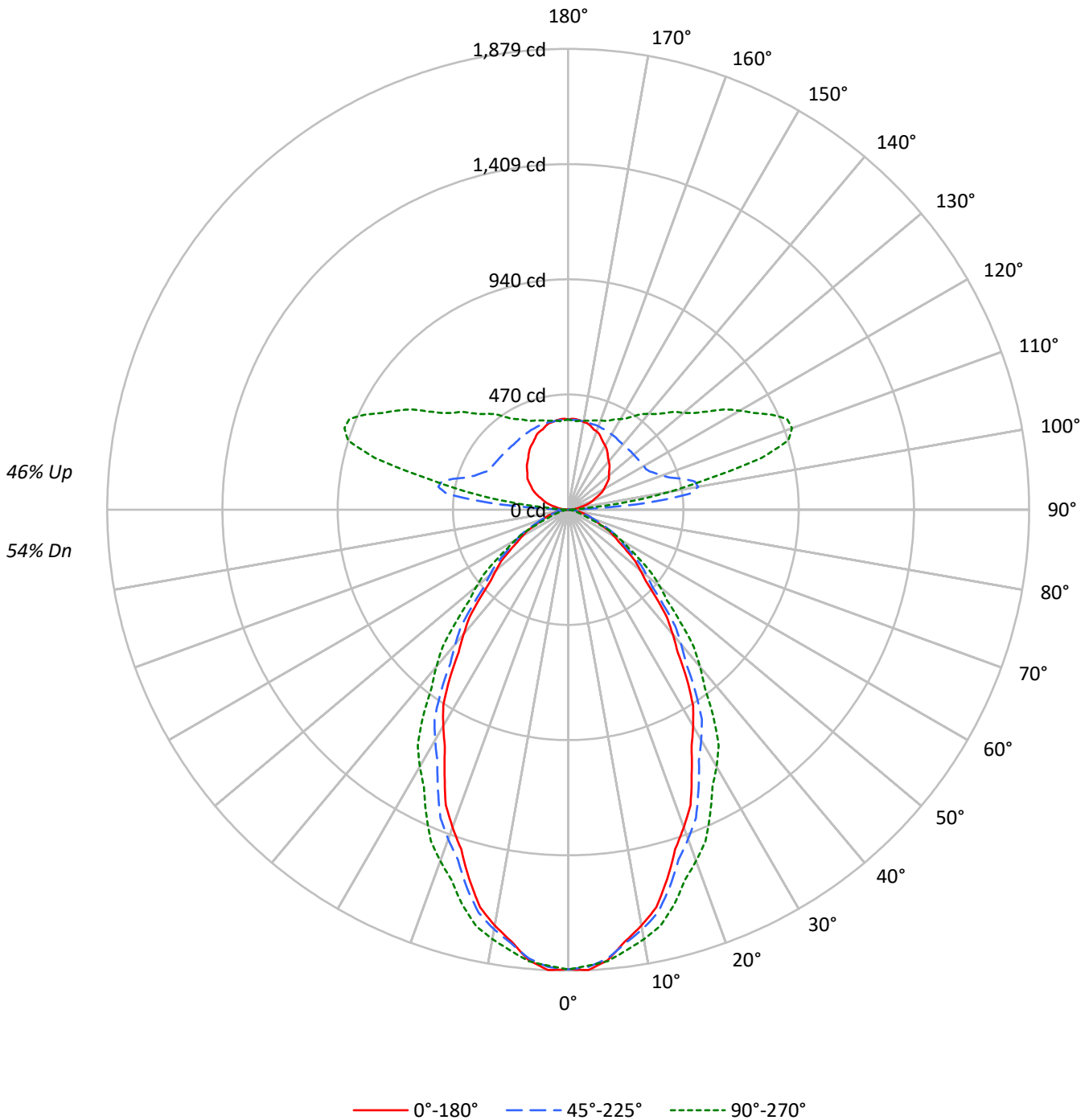
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521774

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P521774

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_5000K

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°	17292	17292	17292
5°	17075	17015	17113
10°	16133	16279	16656
15°	14893	15239	15922
20°	13525	14033	14961
25°	12130	12792	13938
30°	10846	11556	12879
35°	9485	10171	11625
40°	7983	8617	10063
45°	6588	7157	8401
50°	5500	5997	7000
55°	4670	5146	5781
60°	3991	4462	4613
65°	3179	3753	2980
70°	2816	2930	1818
75°	2609	2374	1112
80°	2402	2184	962
85°	2181	2001	783

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8401 cd/sqm

TEST NUMBER: P521774

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.9	3.4
10°-20°	447.1	8.9
20°-30°	579.2	11.5
30°-40°	567.1	11.3
40°-50°	434.1	8.7
50°-60°	289.3	5.8
60°-70°	157.9	3.1
70°-80°	65.8	1.3
80°-90°	18.6	0.4
90°-100°	167.5	3.3
100°-110°	476.6	9.5
110°-120°	456.7	9.1
120°-130°	361.4	7.2
130°-140°	290.1	5.8
140°-150°	227.1	4.5
150°-160°	166.2	3.3
160°-170°	102.9	2.1
170°-180°	34.9	0.7
0°-30°	1198.2	23.9
0°-40°	1765.3	35.2
0°-60°	2488.8	49.6
0°-90°	2731.0	54.5
90°-120°	1100.8	22.0
90°-150°	1979.5	39.5
90°-180°	2283.0	45.5
0°-180°	5014.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1874	1874	1874	1874	1874	
5°	1844	1825	1837	1841	1848	172
15°	1559	1554	1595	1639	1667	435
25°	1192	1195	1257	1311	1369	548
35°	842	846	903	964	1032	524
45°	505	515	548	590	644	394
55°	290	302	320	332	359	263
65°	146	158	172	150	136	151
75°	73	73	67	46	31	78
85°	21	21	19	12	7	22
90°	0	0	0	0	0	2
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

TEST NUMBER: P521774

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1874.2	1874.2	1874.2	1874.2	1874.2
2.5°	1878.8	1862.0	1866.3	1866.1	1861.0
5°	1843.7	1825.2	1837.2	1841.4	1847.8
7.5°	1775.3	1761.3	1783.0	1799.1	1812.2
10°	1722.0	1710.0	1737.6	1761.1	1777.9
12.5°	1660.2	1650.1	1684.4	1715.8	1737.8
15°	1559.2	1553.6	1595.4	1638.8	1666.9
17.5°	1451.1	1448.4	1496.4	1547.0	1583.0
20°	1377.5	1376.7	1429.3	1482.0	1523.8
22.5°	1303.1	1304.9	1360.2	1415.0	1462.7
25°	1191.6	1194.8	1256.6	1311.3	1369.2
27.5°	1088.5	1089.9	1153.8	1211.6	1273.3
30°	1018.1	1022.1	1084.7	1144.5	1208.9
32.5°	947.7	952.4	1013.6	1075.5	1141.1
35°	842.1	846.1	903.0	963.7	1032.1
37.5°	733.2	738.7	789.1	846.6	913.8
40°	662.8	670.9	715.5	769.6	835.5
42.5°	595.1	605.0	646.4	697.7	757.2
45°	504.9	514.6	548.5	590.0	643.9
47.5°	427.3	438.4	464.5	500.2	546.2
50°	383.2	393.7	417.8	444.2	487.7
52.5°	344.4	354.9	376.3	396.7	433.7
55°	290.3	302.4	319.9	332.0	359.4
57.5°	245.9	257.5	271.4	276.9	293.4
60°	216.3	229.1	241.8	241.2	250.0
62.5°	189.3	200.2	212.8	204.1	204.6
65°	145.6	157.6	171.9	150.2	136.5
67.5°	117.6	120.2	134.9	104.7	88.5
70°	104.4	104.4	108.6	81.1	67.4
72.5°	91.9	91.9	88.2	66.0	51.6
75°	73.2	73.2	66.6	45.7	31.2
77.5°	56.4	55.8	51.0	34.1	22.7
80°	45.2	45.2	41.1	26.9	18.1
82.5°	35.4	35.4	31.9	21.0	13.5
85°	20.6	20.6	18.9	12.2	7.4
87.5°	7.2	7.2	6.6	3.9	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

TEST NUMBER: P521774

CATALOG NUMBER: SQ4-WB-050U-075D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)