

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: P521784

Luminaire Tested: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521784
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-100D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5614.4 lumens
Efficiency: N/A
Efficacy: 96.5 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-Direct

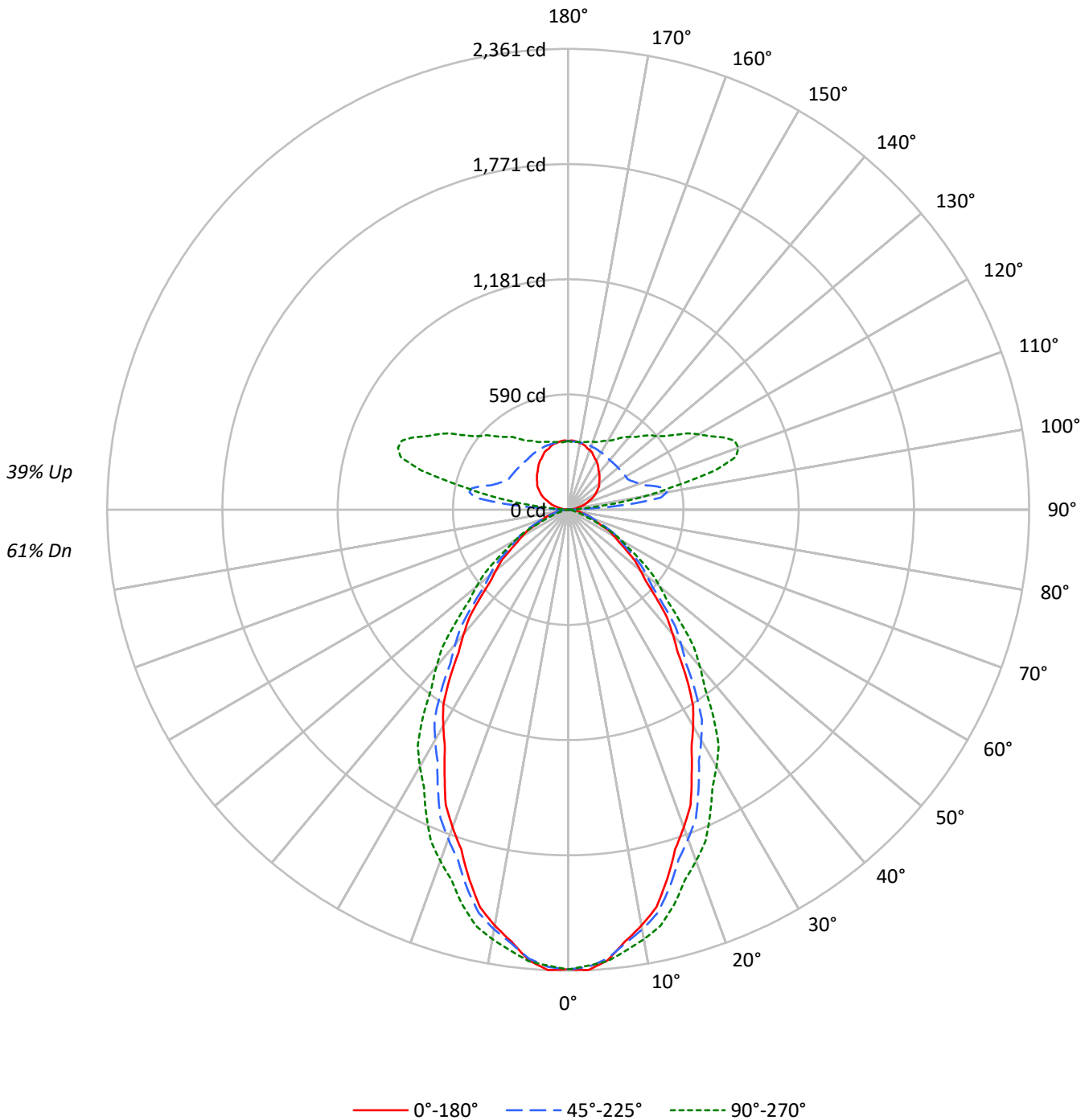
Input Watts (W): 58.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521784

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P521784

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	50	30	10	0													
RCR																																					
0	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66	61						61													
1	102	98	94	91	95	92	89	86	81	78	76	70	69	67	61	60	59	54						54													
2	94	87	82	77	88	82	77	73	72	69	66	63	61	59	55	53	52	48						48													
3	87	78	71	66	81	74	68	63	65	61	57	58	54	51	50	48	46	42						42													
4	80	70	63	57	75	66	60	55	59	54	50	52	48	45	46	43	41	38						38													
5	74	63	56	50	69	60	53	48	54	48	44	48	44	40	42	39	37	34						34													
6	69	58	50	45	65	55	48	43	49	44	40	44	40	36	39	36	33	31						31													
7	64	53	45	40	60	50	43	38	45	40	36	40	36	33	36	33	30	28						28													
8	60	48	41	36	56	46	39	35	42	36	32	37	33	30	34	30	27	25						25													
9	56	45	37	33	53	42	36	32	39	33	29	35	30	27	31	28	25	23						23													
10	53	41	34	30	50	39	33	29	36	31	27	32	28	25	29	26	23	22						22													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21728	21728	21728
5°	21457	21380	21504
10°	20272	20456	20930
15°	18714	19148	20007
20°	16994	17633	18800
25°	15242	16073	17515
30°	13629	14521	16183
35°	11918	12779	14606
40°	10031	10828	12645
45°	8279	8993	10557
50°	6911	7534	8796
55°	5868	6466	7264
60°	5015	5606	5796
65°	3993	4716	3744
70°	3539	3679	2285
75°	3280	2984	1401
80°	3018	2747	1206
85°	2731	2519	984

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10557 cd/sqm

TEST NUMBER: P521784

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	3.8
10°-20°	561.8	10.0
20°-30°	727.8	13.0
30°-40°	712.7	12.7
40°-50°	545.5	9.7
50°-60°	363.5	6.5
60°-70°	198.4	3.5
70°-80°	82.7	1.5
80°-90°	23.4	0.4
90°-100°	160.1	2.9
100°-110°	455.6	8.1
110°-120°	436.5	7.8
120°-130°	345.5	6.2
130°-140°	277.3	4.9
140°-150°	217.1	3.9
150°-160°	158.8	2.8
160°-170°	98.4	1.8
170°-180°	33.4	0.6
0°-30°	1505.6	26.8
0°-40°	2218.3	39.5
0°-60°	3127.2	55.7
0°-90°	3431.6	61.1
90°-120°	1052.2	18.7
90°-150°	1892.1	33.7
90°-180°	2183.0	38.9
0°-180°	5614.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2355	2355	2355	2355	2355	
5°	2317	2294	2308	2314	2322	216
15°	1959	1952	2005	2059	2095	547
25°	1497	1501	1579	1648	1720	689
35°	1058	1063	1135	1211	1297	658
45°	634	647	689	741	809	495
55°	365	380	402	417	452	331
65°	183	198	216	189	172	190
75°	92	92	84	58	39	98
85°	26	26	24	15	9	28
90°	0	0	0	0	0	2
95°	17	69	310	107	66	20
105°	71	107	464	820	780	75
115°	132	159	352	746	876	130
125°	186	206	336	558	667	166
135°	227	246	332	471	532	175
145°	268	282	335	408	444	167
155°	306	313	343	368	384	141
165°	338	339	347	354	359	95
175°	354	352	351	349	346	34
180°	351	351	351	351	351	

TEST NUMBER: P521784

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2355.0	2355.0	2355.0	2355.0	2355.0
2.5°	2360.8	2339.8	2345.1	2344.9	2338.5
5°	2316.8	2293.5	2308.5	2313.8	2321.9
7.5°	2230.8	2213.2	2240.5	2260.7	2277.1
10°	2163.8	2148.7	2183.5	2212.9	2234.1
12.5°	2086.1	2073.4	2116.5	2156.0	2183.7
15°	1959.2	1952.1	2004.7	2059.2	2094.6
17.5°	1823.4	1820.0	1880.3	1943.9	1989.2
20°	1730.8	1729.8	1795.9	1862.2	1914.8
22.5°	1637.4	1639.7	1709.1	1778.1	1837.9
25°	1497.3	1501.4	1578.9	1647.8	1720.5
27.5°	1367.7	1369.6	1449.8	1522.4	1600.0
30°	1279.3	1284.3	1363.0	1438.2	1519.0
32.5°	1190.8	1196.7	1273.7	1351.4	1433.9
35°	1058.1	1063.2	1134.6	1211.0	1296.8
37.5°	921.3	928.2	991.6	1063.8	1148.3
40°	832.9	843.0	899.0	967.0	1049.9
42.5°	747.7	760.3	812.2	876.7	951.5
45°	634.5	646.6	689.2	741.4	809.1
47.5°	536.9	550.9	583.6	628.6	686.3
50°	481.5	494.7	524.9	558.2	612.8
52.5°	432.8	445.9	472.9	498.5	545.0
55°	364.8	379.9	402.0	417.2	451.6
57.5°	309.0	323.5	341.0	347.9	368.7
60°	271.8	287.9	303.8	303.0	314.1
62.5°	237.9	251.6	267.4	256.5	257.1
65°	182.9	198.1	216.0	188.7	171.5
67.5°	147.8	151.0	169.5	131.6	111.2
70°	131.2	131.2	136.4	101.9	84.7
72.5°	115.5	115.5	110.8	82.9	64.9
75°	92.0	92.0	83.7	57.5	39.3
77.5°	70.9	70.1	64.1	42.9	28.5
80°	56.8	56.8	51.7	33.8	22.7
82.5°	44.4	44.4	40.1	26.4	16.9
85°	25.8	25.8	23.8	15.4	9.3
87.5°	9.1	9.1	8.3	4.9	4.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	28.3	65.7	19.1	14.4
95°	17.4	69.0	310.0	107.3	66.1
97.5°	31.9	80.8	477.4	341.6	234.1
100°	42.1	87.8	513.7	520.4	400.8
102.5°	53.3	95.4	505.7	666.1	561.7
105°	70.8	107.4	464.3	820.1	779.6
107.5°	88.6	121.4	415.9	863.5	899.6
110°	100.9	131.6	388.1	846.9	927.9

TEST NUMBER: P521784

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.6	141.8	369.4	807.6	923.1
115°	131.6	159.0	352.1	745.8	875.8
117.5°	148.3	174.0	341.8	678.3	815.9
120°	161.7	183.2	340.7	639.6	771.6
122.5°	172.4	193.9	338.0	605.8	728.3
125°	185.7	206.0	336.0	557.6	666.7
127.5°	200.3	219.2	335.0	528.9	618.7
130°	207.8	226.7	333.4	508.8	587.2
132.5°	215.8	234.2	333.4	493.2	565.3
135°	227.1	246.1	332.0	471.0	532.4
137.5°	237.8	256.2	331.9	452.3	505.3
140°	245.8	264.8	331.3	436.7	487.7
142.5°	254.9	270.7	333.0	424.3	470.0
145°	267.9	281.6	334.7	407.7	444.2
147.5°	279.0	292.3	337.6	390.9	422.5
150°	288.6	297.7	338.7	385.3	407.5
152.5°	296.1	305.7	339.8	377.8	398.4
155°	306.0	313.1	342.7	368.4	383.5
157.5°	318.3	322.6	343.4	364.2	374.9
160°	324.7	327.9	346.0	361.0	370.1
162.5°	328.4	332.2	346.6	358.2	365.3
165°	338.0	339.3	346.7	354.2	359.4
167.5°	344.6	343.4	349.8	353.2	355.3
170°	346.7	346.1	348.7	349.4	352.1
172.5°	351.5	349.3	350.3	348.4	350.5
175°	354.1	352.1	350.7	348.7	346.0
177.5°	355.1	352.0	350.3	348.2	348.7
180°	351.4	351.4	351.4	351.4	351.4

(END OF REPORT)