

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: P521074

Luminaire Tested: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521074
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5793.4 lumens
Efficiency: N/A
Efficacy: 81.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

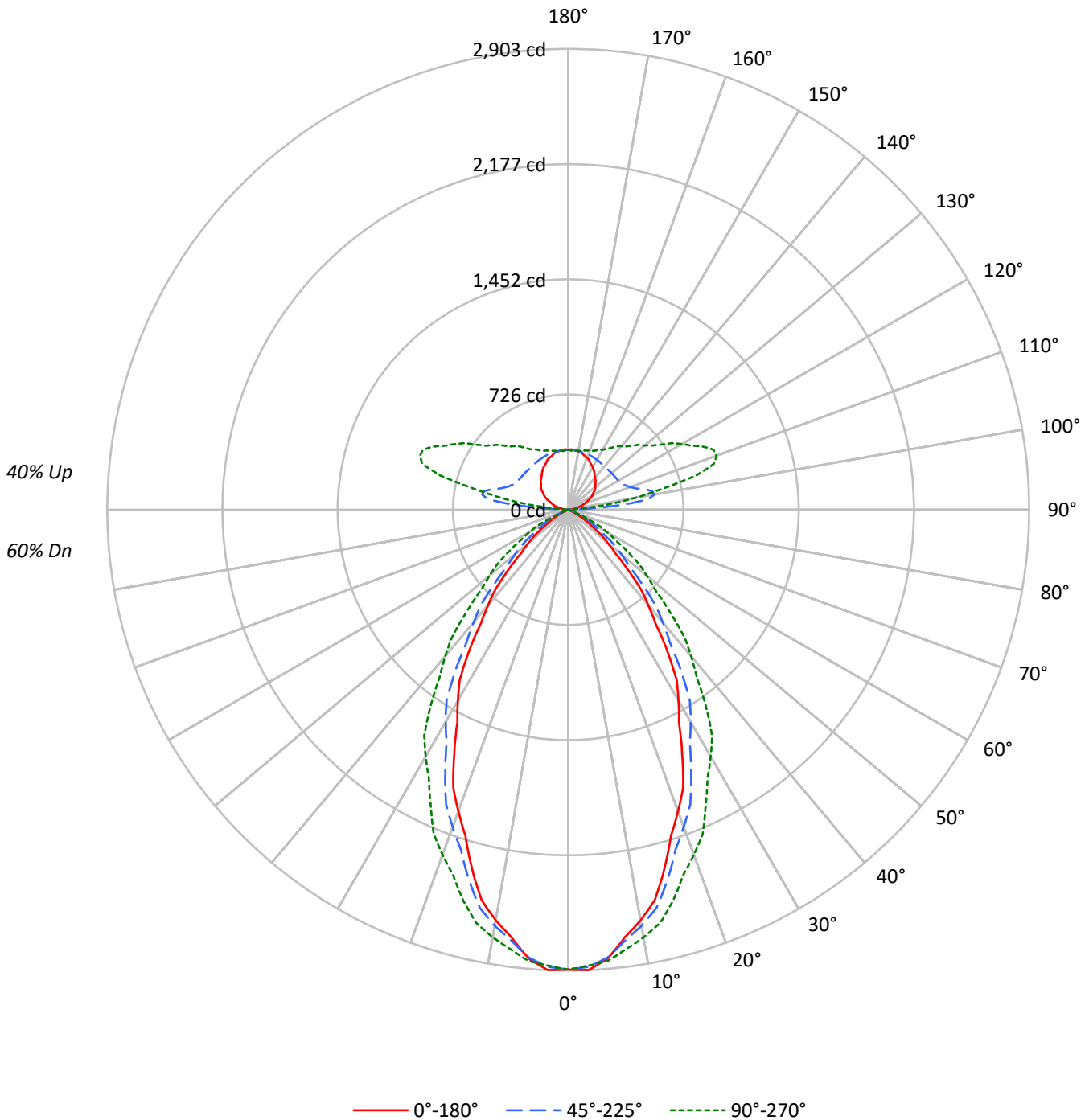
Input Watts (W): 71.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521074

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Luminous Intensity Polar Plot



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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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60																			
1	102	99	95	92	95	92	90	87	81	79	77	70	69	68	61	60	59	54																			
2	95	89	84	79	89	83	79	75	74	70	68	65	62	60	56	55	53	49																			
3	88	80	74	69	82	75	70	66	67	63	60	59	56	54	52	50	48	44																			
4	82	72	66	60	77	68	62	58	61	56	53	54	51	48	48	45	43	40																			
5	76	66	59	53	71	62	56	51	56	51	47	50	46	43	44	42	39	37																			
6	71	60	53	48	66	57	51	46	51	46	43	46	42	39	41	38	36	33																			
7	66	55	48	43	62	52	46	42	47	42	39	43	39	36	38	35	33	31																			
8	62	51	44	39	58	48	42	38	44	39	35	40	36	33	36	33	30	28																			
9	58	47	40	36	55	45	39	34	41	36	32	37	33	30	33	30	28	26																			
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	31	28	26	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26725	26725	26725
5°	26294	26229	26424
10°	24603	24932	25627
15°	22367	23076	24362
20°	19854	20886	22716
25°	17290	18660	20871
30°	14809	16437	19124
35°	12279	13953	17015
40°	9435	11156	14499
45°	6820	8447	11666
50°	4646	6295	9252
55°	3021	4554	7190
60°	1733	3207	5198
65°	458	1958	2631
70°	227	604	755
75°	100	50	0
80°	74	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11666 cd/sqm

TEST NUMBER: P521074

CATALOG NUMBER: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.3	4.6
10°-20°	676.0	11.7
20°-30°	846.3	14.6
30°-40°	781.7	13.5
40°-50°	525.3	9.1
50°-60°	271.3	4.7
60°-70°	85.0	1.5
70°-80°	5.4	0.1
80°-90°	0.1	0.0
90°-100°	171.5	3.0
100°-110°	488.0	8.4
110°-120°	467.6	8.1
120°-130°	370.1	6.4
130°-140°	297.0	5.1
140°-150°	232.5	4.0
150°-160°	170.1	2.9
160°-170°	105.4	1.8
170°-180°	35.8	0.6
0°-30°	1786.7	30.8
0°-40°	2568.4	44.3
0°-60°	3364.9	58.1
0°-90°	3455.4	59.6
90°-120°	1127.1	19.5
90°-150°	2026.7	35.0
90°-180°	2338.0	40.4
0°-180°	5793.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2897	2897	2897	2897	2897	
5°	2839	2810	2832	2842	2853	263
15°	2342	2333	2416	2497	2550	652
25°	1698	1712	1833	1958	2050	779
35°	1090	1118	1239	1385	1511	675
45°	523	554	647	774	894	411
55°	188	219	283	363	447	175
65°	21	40	90	108	120	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

TEST NUMBER: P521074

CATALOG NUMBER: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2896.6	2896.6	2896.6	2896.6	2896.6
2.5°	2903.3	2875.9	2883.1	2883.0	2875.3
5°	2839.1	2810.4	2832.1	2842.2	2853.1
7.5°	2719.2	2696.7	2738.5	2769.9	2792.6
10°	2626.1	2606.9	2661.2	2703.9	2735.4
12.5°	2518.5	2503.7	2569.2	2627.9	2668.2
15°	2341.7	2333.4	2415.9	2497.0	2550.5
17.5°	2152.2	2151.9	2246.1	2346.8	2411.2
20°	2022.1	2026.3	2127.2	2238.3	2313.6
22.5°	1892.1	1901.7	2009.5	2125.3	2211.6
25°	1698.4	1712.1	1833.0	1958.4	2050.2
27.5°	1512.3	1532.3	1659.5	1789.8	1901.6
30°	1390.1	1413.4	1542.9	1680.0	1795.1
32.5°	1270.2	1297.9	1424.0	1569.1	1686.4
35°	1090.2	1117.7	1238.8	1384.6	1510.7
37.5°	904.4	931.3	1049.6	1193.1	1329.3
40°	783.4	813.5	926.3	1065.4	1203.8
42.5°	673.5	703.6	809.7	946.4	1077.1
45°	522.7	554.2	647.4	773.5	894.1
47.5°	397.7	432.0	513.7	627.8	737.7
50°	323.7	358.0	438.6	539.1	644.6
52.5°	264.3	297.5	370.2	464.9	561.7
55°	187.8	219.3	283.1	363.4	447.0
57.5°	129.8	156.9	214.1	281.2	346.7
60°	93.9	119.9	173.8	228.2	281.7
62.5°	62.5	86.3	139.0	180.7	216.6
65°	21.0	40.2	89.7	108.2	120.5
67.5°	10.7	12.8	47.1	49.7	53.8
70°	8.4	8.4	22.4	23.9	28.0
72.5°	6.2	6.2	9.0	11.5	12.3
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

TEST NUMBER: P521074

CATALOG NUMBER: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)