

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: P521070

Luminaire Tested: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521070
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_4000K
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5507.6 lumens
Efficiency: N/A
Efficacy: 76.9 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

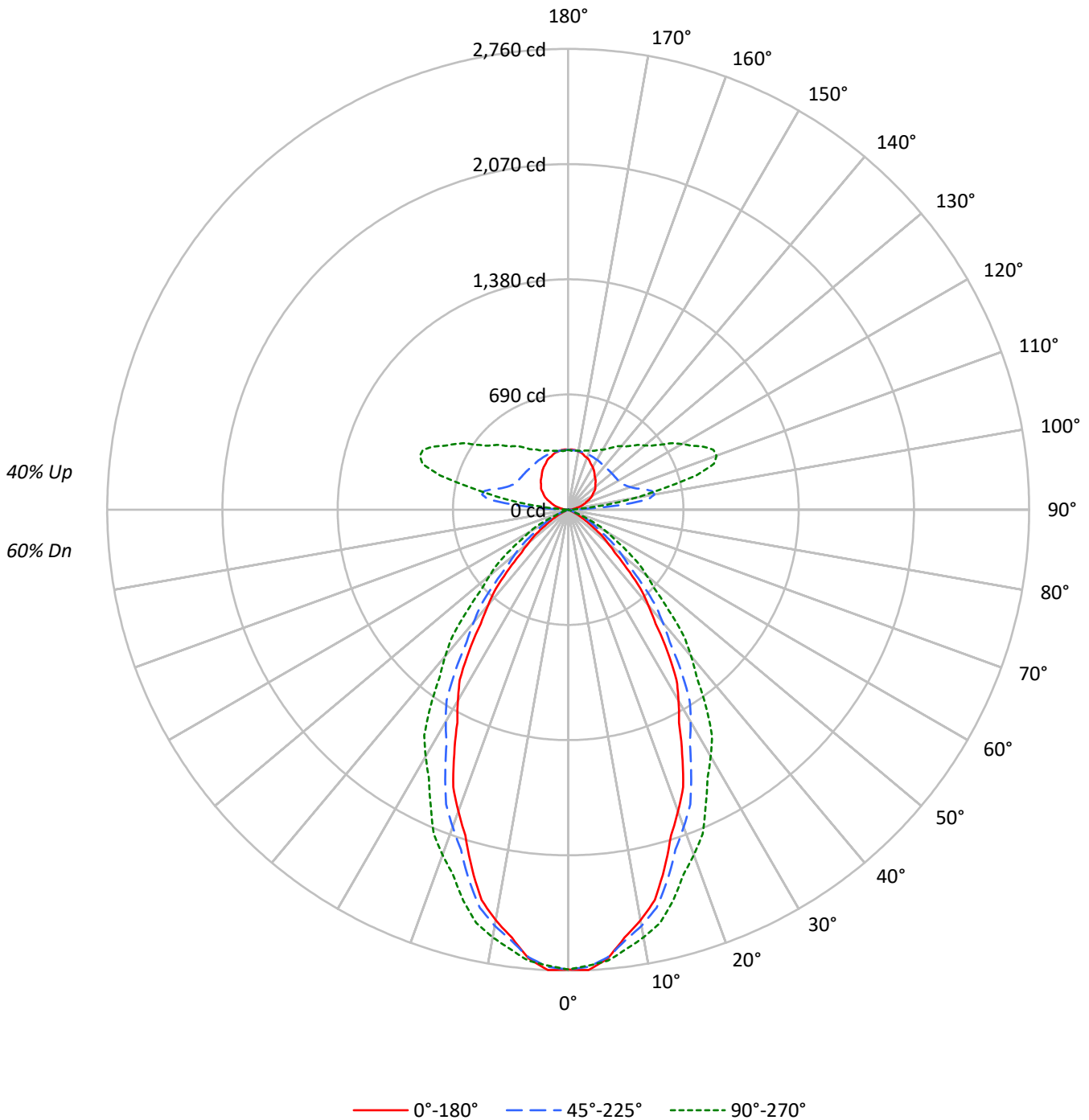
Input Watts (W): 71.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	25406	25406	25406
5°	24998	24936	25121
10°	23389	23701	24363
15°	21263	21937	23159
20°	18875	19856	21595
25°	16438	17739	19841
30°	14080	15627	18181
35°	11674	13265	16175
40°	8969	10606	13783
45°	6483	8031	11091
50°	4417	5985	8796
55°	2871	4329	6836
60°	1648	3048	4942
65°	437	1862	2502
70°	216	575	718
75°	96	46	0
80°	69	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11091 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.3	4.6
10°-20°	642.7	11.7
20°-30°	804.6	14.6
30°-40°	743.1	13.5
40°-50°	499.4	9.1
50°-60°	257.9	4.7
60°-70°	80.8	1.5
70°-80°	5.1	0.1
80°-90°	0.1	0.0
90°-100°	163.0	3.0
100°-110°	463.9	8.4
110°-120°	444.5	8.1
120°-130°	351.8	6.4
130°-140°	282.4	5.1
140°-150°	221.1	4.0
150°-160°	161.8	2.9
160°-170°	100.2	1.8
170°-180°	34.0	0.6
0°-30°	1698.5	30.8
0°-40°	2441.7	44.3
0°-60°	3199.0	58.1
0°-90°	3284.9	59.6
90°-120°	1071.5	19.5
90°-150°	1926.7	35.0
90°-180°	2223.0	40.4
0°-180°	5507.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2754	2754	2754	2754	2754	
5°	2699	2672	2692	2702	2712	250
15°	2226	2218	2297	2374	2425	620
25°	1615	1628	1742	1862	1949	740
35°	1036	1062	1178	1316	1436	642
45°	497	527	616	735	850	390
55°	178	208	269	346	425	167
65°	20	38	85	103	115	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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°	2753.7	2753.7	2753.7	2753.7	2753.7
2.5°	2760.1	2734.0	2740.9	2740.7	2733.5
5°	2699.1	2671.7	2692.4	2702.0	2712.4
7.5°	2585.0	2563.7	2603.4	2633.2	2654.8
10°	2496.6	2478.3	2529.9	2570.5	2600.5
12.5°	2394.3	2380.2	2442.5	2498.3	2536.5
15°	2226.1	2218.3	2296.7	2373.8	2424.6
17.5°	2046.0	2045.8	2135.3	2231.0	2292.2
20°	1922.4	1926.3	2022.3	2127.9	2199.5
22.5°	1798.8	1807.9	1910.4	2020.4	2102.5
25°	1614.7	1627.7	1742.5	1861.8	1949.0
27.5°	1437.7	1456.8	1577.6	1701.5	1807.8
30°	1321.6	1343.7	1466.8	1597.2	1706.6
32.5°	1207.5	1233.8	1353.8	1491.7	1603.2
35°	1036.5	1062.5	1177.7	1316.3	1436.1
37.5°	859.8	885.3	997.8	1134.3	1263.7
40°	744.7	773.4	880.6	1012.8	1144.4
42.5°	640.3	668.9	769.8	899.7	1023.9
45°	496.9	526.9	615.5	735.3	850.0
47.5°	378.1	410.6	488.4	596.8	701.3
50°	307.7	340.3	417.0	512.5	612.8
52.5°	251.3	282.8	352.0	442.0	534.0
55°	178.5	208.5	269.1	345.5	425.0
57.5°	123.4	149.2	203.6	267.3	329.6
60°	89.3	114.0	165.2	217.0	267.8
62.5°	59.4	82.1	132.2	171.8	206.0
65°	20.0	38.2	85.3	102.8	114.6
67.5°	10.1	12.2	44.8	47.2	51.2
70°	8.0	8.0	21.3	22.7	26.6
72.5°	5.9	5.9	8.5	10.9	11.7
75°	2.7	2.7	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	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°	5.4	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)