

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: P521031

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521031
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-050D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 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: 3540.5 lumens
Efficiency: N/A
Efficacy: 97.0 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: Semi-Indirect

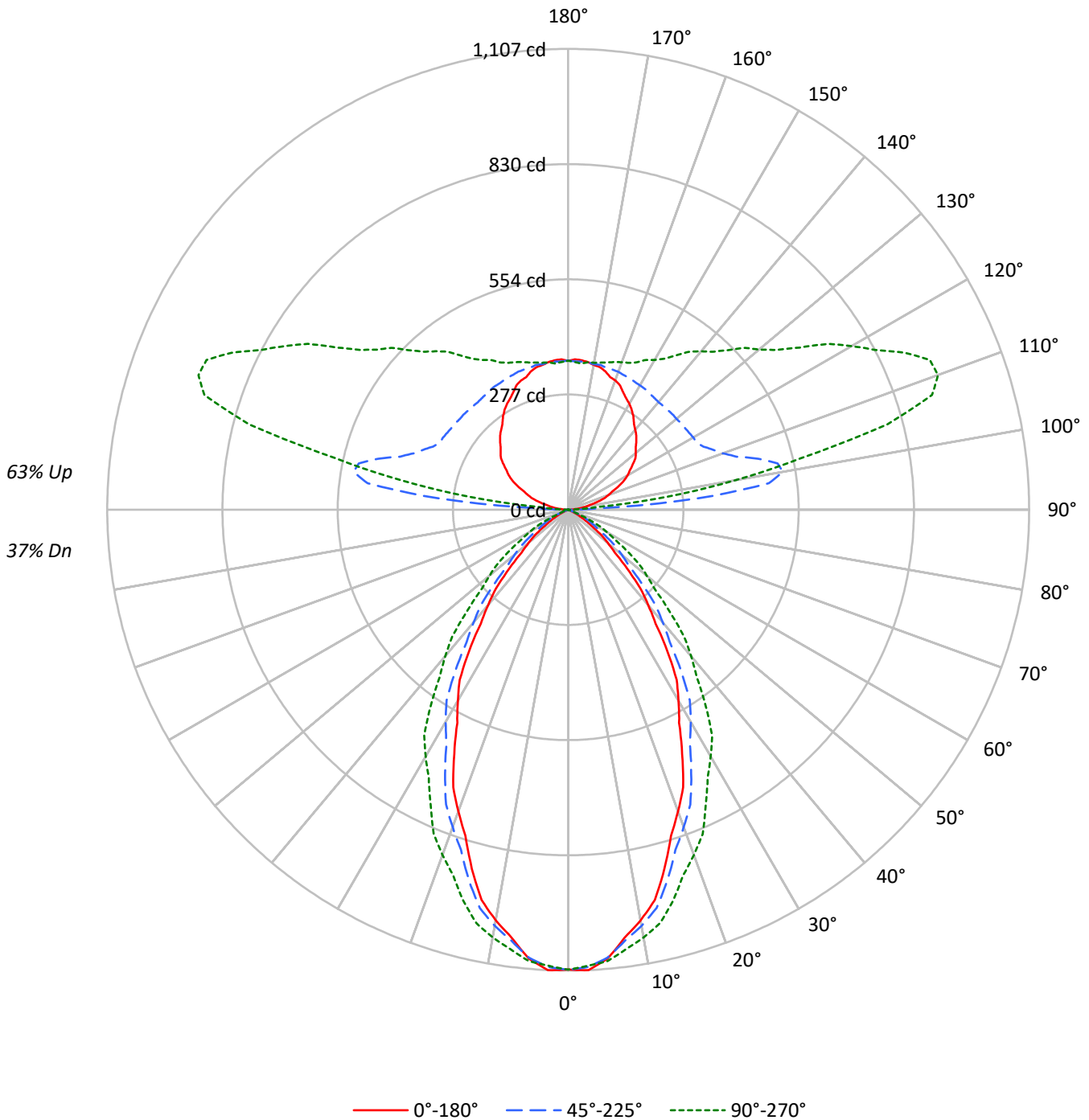
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	50	30	10	0														
RCR																																						
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37																				
1	96	93	89	86	87	84	81	79	69	67	65	54	53	52	41	41	40	34																				
2	89	82	77	73	81	75	71	67	62	59	56	49	47	46	38	37	36	31																				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	28																				
4	76	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25																				
5	70	60	52	47	64	55	49	44	46	41	38	38	34	32	30	28	26	23																				
6	65	54	47	42	59	50	43	39	42	37	34	34	31	29	28	25	24	21																				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	26	23	22	19																				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	24	24	22	20	18																				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	22	22	20	18	16																				
10	49	38	31	27	45	35	30	26	30	26	23	25	22	20	21	19	17	15																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10193	10193	10193
5°	10029	10004	10078
10°	9384	9509	9774
15°	8531	8801	9291
20°	7573	7966	8664
25°	6595	7117	7960
30°	5648	6270	7294
35°	4683	5322	6490
40°	3599	4255	5529
45°	2602	3222	4449
50°	1773	2401	3530
55°	1152	1737	2743
60°	661	1223	1982
65°	175	747	1004
70°	86	232	289
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4449 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	2.8
10°-20°	257.8	7.3
20°-30°	322.8	9.1
30°-40°	298.2	8.4
40°-50°	200.3	5.7
50°-60°	103.5	2.9
60°-70°	32.4	0.9
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	163.0	4.6
100°-110°	463.9	13.1
110°-120°	444.5	12.6
120°-130°	351.8	9.9
130°-140°	282.4	8.0
140°-150°	221.1	6.2
150°-160°	161.8	4.6
160°-170°	100.2	2.8
170°-180°	34.0	1.0
0°-30°	681.4	19.2
0°-40°	979.6	27.7
0°-60°	1283.4	36.2
0°-90°	1317.9	37.2
90°-120°	1071.5	30.3
90°-150°	1926.7	54.4
90°-180°	2223.0	62.8
0°-180°	3540.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1083	1072	1080	1084	1088	100
15°	893	890	921	952	973	249
25°	648	653	699	747	782	297
35°	416	426	472	528	576	258
45°	199	211	247	295	341	157
55°	72	84	108	139	170	67
65°	8	15	34	41	46	14
75°	1	1	0	0	0	2
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°	1104.8	1104.8	1104.8	1104.8	1104.8
2.5°	1107.3	1096.9	1099.6	1099.6	1096.6
5°	1082.9	1071.9	1080.2	1084.0	1088.2
7.5°	1037.1	1028.5	1044.5	1056.4	1065.1
10°	1001.6	994.3	1015.0	1031.3	1043.3
12.5°	960.6	954.9	979.9	1002.3	1017.6
15°	893.1	890.0	921.4	952.4	972.7
17.5°	820.9	820.7	856.7	895.1	919.6
20°	771.3	772.8	811.3	853.7	882.4
22.5°	721.7	725.3	766.4	810.6	843.5
25°	647.8	653.0	699.1	746.9	781.9
27.5°	576.8	584.4	632.9	682.6	725.3
30°	530.2	539.1	588.5	640.8	684.7
32.5°	484.5	495.0	543.1	598.5	643.2
35°	415.8	426.3	472.5	528.1	576.2
37.5°	345.0	355.2	400.3	455.1	507.0
40°	298.8	310.3	353.3	406.3	459.1
42.5°	256.9	268.4	308.8	360.9	410.8
45°	199.4	211.4	246.9	295.0	341.0
47.5°	151.7	164.7	195.9	239.4	281.3
50°	123.5	136.5	167.3	205.6	245.9
52.5°	100.8	113.4	141.2	177.3	214.2
55°	71.6	83.6	108.0	138.6	170.5
57.5°	49.5	59.8	81.7	107.2	132.2
60°	35.8	45.7	66.3	87.0	107.4
62.5°	23.8	32.9	53.0	68.9	82.6
65°	8.0	15.3	34.2	41.3	46.0
67.5°	4.1	4.9	18.0	19.0	20.5
70°	3.2	3.2	8.6	9.1	10.7
72.5°	2.4	2.4	3.4	4.4	4.7
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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)