

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

(formerly Eaton)

Brand: CORELITE

Report Number: P518696

Luminaire Tested: **SQ4-BB-100U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518696
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

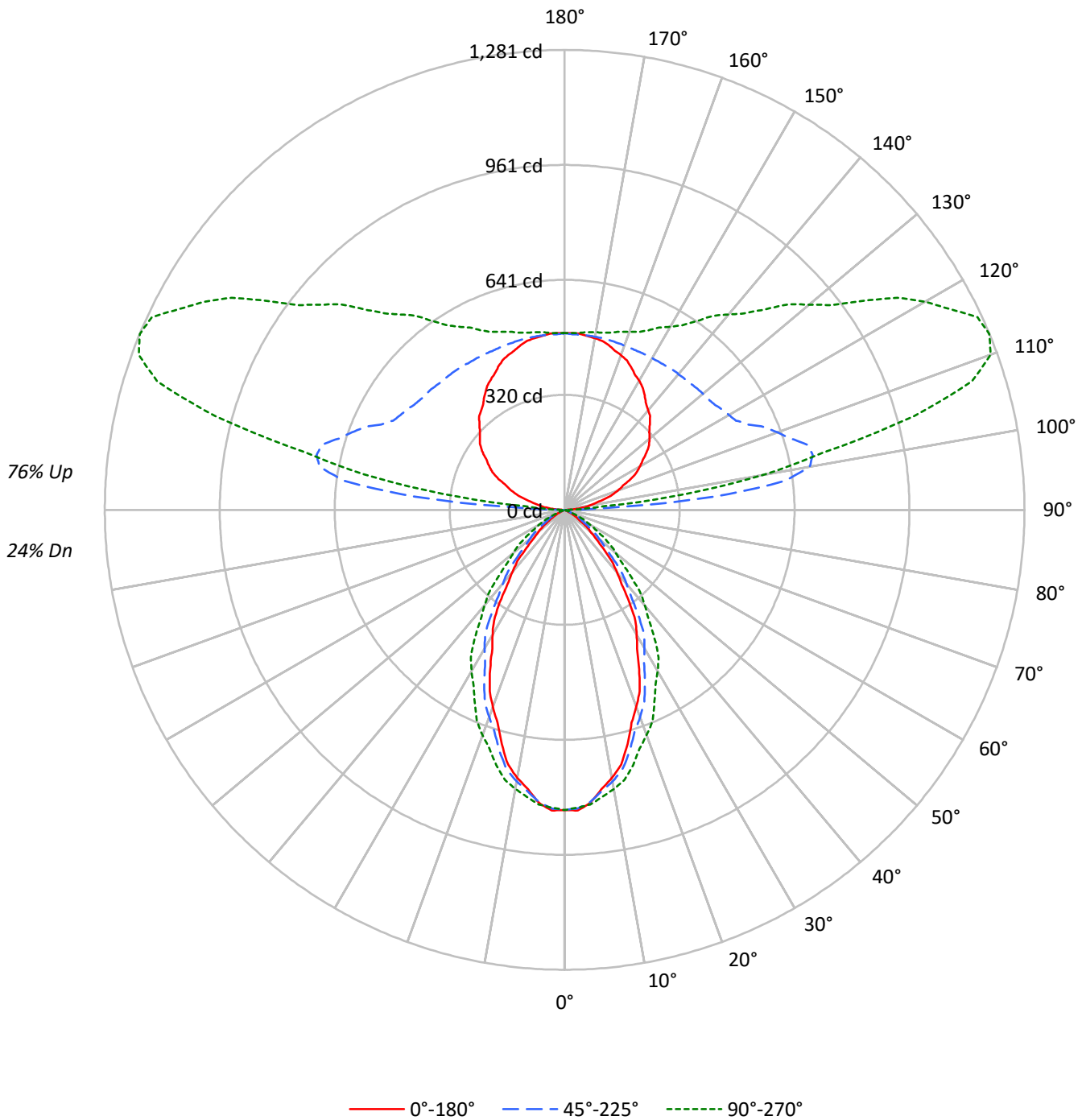
Lumens per Lamp: N/A
Luminaire Lumens: 4194.5 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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				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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	30	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	70	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	31	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	55	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	17	16	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	15	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6558
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4912
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2075
60°	500	926	1500
65°	133	565	760
70°	65	175	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	1.8
10°-20°	195.1	4.7
20°-30°	244.3	5.8
30°-40°	225.6	5.4
40°-50°	151.6	3.6
50°-60°	78.3	1.9
60°-70°	24.5	0.6
70°-80°	1.5	0.0
80°-90°	1.0	0.0
90°-100°	230.4	5.5
100°-110°	635.9	15.2
110°-120°	655.9	15.6
120°-130°	527.0	12.6
130°-140°	414.2	9.9
140°-150°	317.7	7.6
150°-160°	228.3	5.4
160°-170°	139.6	3.3
170°-180°	47.1	1.1
0°-30°	515.7	12.3
0°-40°	741.4	17.7
0°-60°	971.3	23.2
0°-90°	998.4	23.8
90°-120°	1522.1	36.3
90°-150°	2781.0	66.3
90°-180°	3196.0	76.2
0°-180°	4194.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	820	811	818	820	824	76
15°	676	674	697	721	736	188
25°	490	494	529	565	592	225
35°	315	323	358	400	436	195
45°	151	160	187	223	258	118
55°	54	63	82	105	129	51
65°	6	12	26	31	35	10
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	3	6	7	8	2
95°	34	125	418	172	112	36
105°	113	175	700	1068	1006	121
115°	203	245	564	1116	1269	200
125°	279	317	511	864	1014	248
135°	335	371	497	700	789	259
145°	389	416	490	596	641	243
155°	438	453	486	535	552	202
165°	475	481	489	508	512	134
175°	492	493	490	497	495	47
180°	492	492	492	492	492	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	836.1	836.1	836.1	836.1	836.1
2.5°	838.1	830.2	832.2	832.2	830.0
5°	819.5	811.2	817.5	820.4	823.6
7.5°	784.9	778.4	790.5	799.5	806.1
10°	758.1	752.5	768.2	780.5	789.6
12.5°	727.0	722.7	741.6	758.6	770.2
15°	675.9	673.6	697.4	720.8	736.2
17.5°	621.3	621.2	648.4	677.4	696.0
20°	583.7	584.9	614.1	646.1	667.9
22.5°	546.2	548.9	580.1	613.5	638.4
25°	490.3	494.2	529.1	565.3	591.8
27.5°	436.6	442.3	479.0	516.6	548.9
30°	401.3	408.0	445.4	485.0	518.2
32.5°	366.7	374.6	411.1	452.9	486.8
35°	314.7	322.6	357.6	399.7	436.1
37.5°	261.1	268.8	303.0	344.4	383.7
40°	226.1	234.8	267.4	307.5	347.5
42.5°	194.4	203.1	233.7	273.2	310.9
45°	150.9	160.0	186.9	223.3	258.1
47.5°	114.8	124.7	148.3	181.2	212.9
50°	93.4	103.3	126.6	155.6	186.1
52.5°	76.3	85.9	106.9	134.2	162.1
55°	54.2	63.3	81.7	104.9	129.0
57.5°	37.5	45.3	61.8	81.2	100.1
60°	27.1	34.6	50.2	65.9	81.3
62.5°	18.0	24.9	40.1	52.2	62.5
65°	6.1	11.6	25.9	31.2	34.8
67.5°	3.1	3.7	13.6	14.3	15.5
70°	2.4	2.4	6.5	6.9	8.1
72.5°	1.8	1.8	2.6	3.3	3.6
75°	0.8	0.8	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	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°	0.3	0.6	1.3	1.4	1.6
90°	1.6	3.1	6.3	7.1	7.9
92.5°	14.2	58.8	105.1	38.4	29.9
95°	33.8	124.6	417.9	171.8	111.8
97.5°	56.0	139.6	619.1	476.6	345.2
100°	72.4	148.6	693.4	698.3	567.4
102.5°	88.1	158.8	707.8	862.7	738.7
105°	113.3	174.9	699.7	1068.1	1005.8
107.5°	140.1	194.9	660.6	1167.2	1190.0
110°	159.0	208.2	630.4	1188.5	1262.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.0	223.4	602.1	1171.7	1280.6
115°	203.0	245.4	563.5	1115.5	1268.7
117.5°	226.7	268.8	538.2	1036.5	1210.7
120°	242.4	284.0	528.1	983.0	1158.5
122.5°	257.5	297.2	519.9	933.1	1099.3
125°	278.6	317.1	510.8	864.4	1014.5
127.5°	296.5	335.0	505.4	806.3	935.8
130°	308.5	347.0	502.9	770.8	888.5
132.5°	319.8	356.5	500.4	741.0	847.6
135°	335.3	371.4	496.6	700.1	789.4
137.5°	352.6	385.5	494.7	665.8	742.0
140°	362.0	394.3	493.5	642.9	709.9
142.5°	372.7	402.6	492.2	622.6	681.6
145°	388.8	415.7	490.3	596.0	641.4
147.5°	404.2	427.8	488.6	573.6	608.8
150°	415.5	434.8	487.9	560.2	588.7
152.5°	424.4	442.4	487.3	548.8	572.3
155°	438.4	453.0	486.4	534.8	551.7
157.5°	451.3	462.5	486.5	524.6	536.1
160°	458.8	468.8	487.2	518.8	527.3
162.5°	465.1	473.9	487.8	513.8	520.4
165°	474.6	480.7	488.7	507.7	511.6
167.5°	481.8	485.5	489.5	504.0	505.3
170°	485.6	488.7	489.5	502.1	502.1
172.5°	488.7	490.6	489.5	499.6	499.0
175°	491.9	492.7	489.5	496.6	495.0
177.5°	493.1	492.5	489.4	493.7	492.5
180°	491.9	491.9	491.9	491.9	491.9

(END OF REPORT)