

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: P518449

Luminaire Tested: **SQ4-BB-050U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518449
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

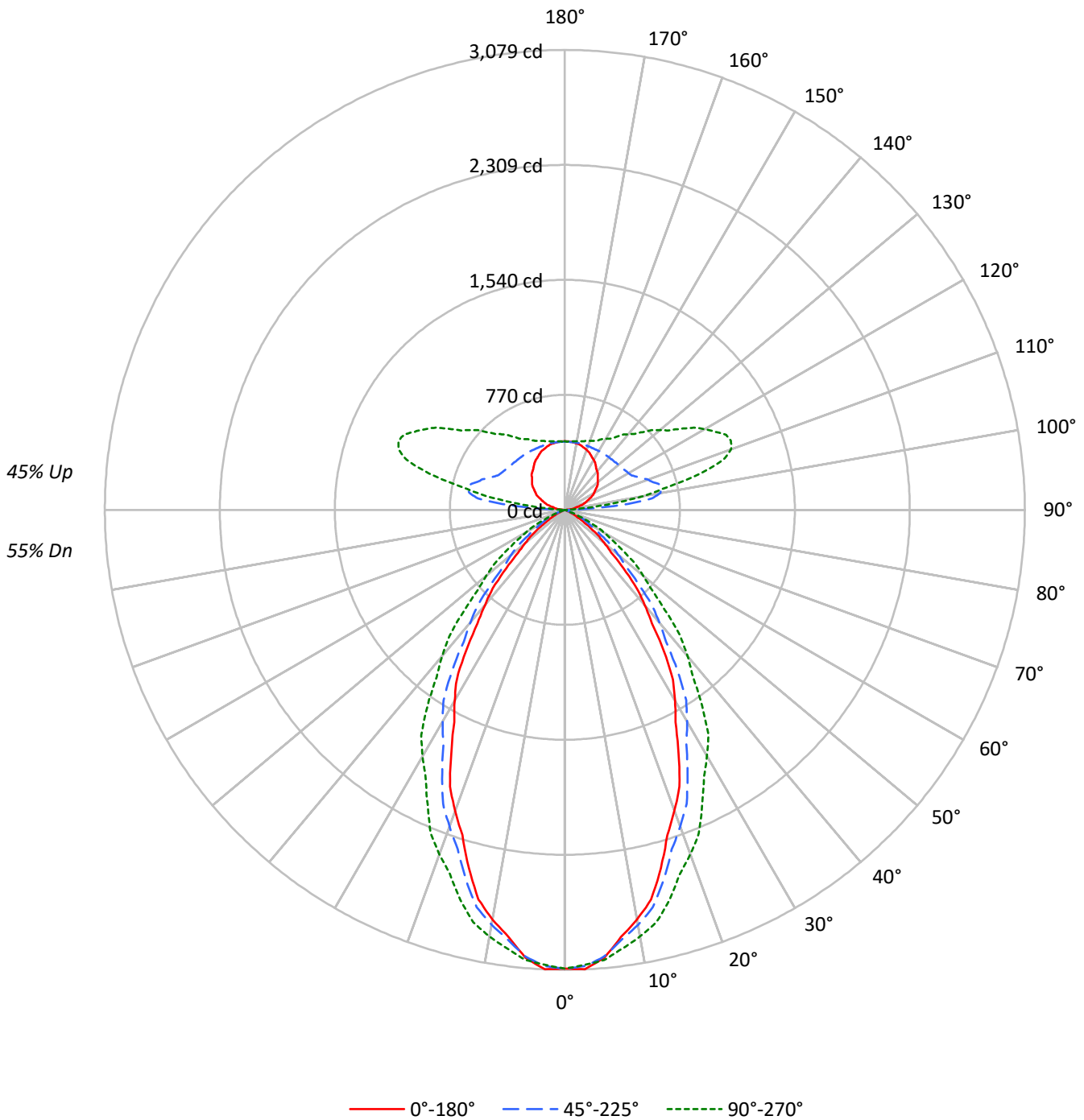
Lumens per Lamp: N/A
Luminaire Lumens: 6654.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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	0																
RCR																																					
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																			
1	101	97	94	91	94	91	88	86	78	77	75	67	66	65	57	56	55	50																			
2	94	87	82	78	87	82	77	74	71	68	65	61	59	57	52	51	50	45																			
3	87	79	72	67	81	74	68	64	65	61	57	56	53	51	48	46	45	41																			
4	80	71	64	59	75	67	61	56	59	54	51	52	48	46	45	42	40	37																			
5	75	65	57	52	70	61	55	50	54	49	45	47	44	41	41	39	37	34																			
6	70	59	52	46	65	56	49	45	49	44	41	44	40	37	38	36	33	31																			
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	28																			
8	61	50	43	38	57	47	41	36	42	37	34	38	34	31	33	30	28	26																			
9	57	46	39	34	53	44	37	33	39	34	31	35	31	28	31	28	26	24																			
10	54	42	36	31	50	40	34	30	36	32	28	33	29	26	29	26	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18682
10°	17394	17626	18117
15°	15812	16314	17223
20°	14036	14766	16059
25°	12223	13192	14755
30°	10470	11621	13521
35°	8682	9864	12029
40°	6670	7887	10249
45°	4822	5972	8247
50°	3285	4451	6541
55°	2135	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.3	4.2
10°-20°	716.9	10.8
20°-30°	897.5	13.5
30°-40°	829.0	12.5
40°-50°	557.0	8.4
50°-60°	287.7	4.3
60°-70°	90.1	1.4
70°-80°	5.7	0.1
80°-90°	1.9	0.0
90°-100°	219.7	3.3
100°-110°	596.8	9.0
110°-120°	613.6	9.2
120°-130°	490.6	7.4
130°-140°	385.5	5.8
140°-150°	295.6	4.4
150°-160°	212.5	3.2
160°-170°	130.0	2.0
170°-180°	43.8	0.7
0°-30°	1894.7	28.5
0°-40°	2723.7	40.9
0°-60°	3568.4	53.6
0°-90°	3666.1	55.1
90°-120°	1430.0	21.5
90°-150°	2601.6	39.1
90°-180°	2988.0	44.9
0°-180°	6654.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3011	2980	3003	3014	3026	279
15°	2483	2474	2562	2648	2705	692
25°	1801	1816	1944	2077	2174	826
35°	1156	1185	1314	1468	1602	716
45°	554	588	687	820	948	435
55°	199	233	300	385	474	186
65°	22	43	95	115	128	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	2	6	10	13	13	2
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	461	43
180°	458	458	458	458	458	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3071.7	3071.7	3071.7	3071.7	3071.7
2.5°	3078.9	3049.8	3057.5	3057.3	3049.1
5°	3010.8	2980.3	3003.4	3014.0	3025.7
7.5°	2883.6	2859.8	2904.1	2937.3	2961.5
10°	2784.9	2764.6	2822.1	2867.4	2900.8
12.5°	2670.8	2655.1	2724.6	2786.8	2829.5
15°	2483.2	2474.5	2562.0	2648.0	2704.7
17.5°	2282.3	2282.0	2381.9	2488.7	2556.9
20°	2144.4	2148.8	2255.9	2373.6	2453.5
22.5°	2006.5	2016.7	2131.0	2253.8	2345.3
25°	1801.1	1815.7	1943.8	2076.8	2174.1
27.5°	1603.8	1625.0	1759.8	1898.0	2016.6
30°	1474.2	1498.9	1636.2	1781.6	1903.7
32.5°	1347.0	1376.3	1510.2	1664.0	1788.3
35°	1156.2	1185.2	1313.7	1468.3	1602.0
37.5°	959.1	987.6	1113.1	1265.3	1409.7
40°	830.7	862.7	982.3	1129.8	1276.5
42.5°	714.2	746.2	858.7	1003.6	1142.2
45°	554.3	587.7	686.6	820.2	948.1
47.5°	421.7	458.1	544.8	665.7	782.3
50°	343.3	379.6	465.1	571.7	683.6
52.5°	280.3	315.4	392.6	493.0	595.6
55°	199.1	232.6	300.2	385.4	474.1
57.5°	137.6	166.4	227.1	298.2	367.7
60°	99.6	127.2	184.3	242.0	298.7
62.5°	66.3	91.6	147.4	191.7	229.7
65°	22.3	42.6	95.1	114.7	127.8
67.5°	11.3	13.6	49.9	52.7	57.1
70°	8.9	8.9	23.8	25.4	29.7
72.5°	6.5	6.5	9.5	12.2	13.1
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.3	1.2	2.1	2.6	2.6
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.1	104.5	44.9	38.0
95°	32.4	120.1	382.6	166.5	111.8
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	105.9	164.9	656.3	999.2	940.2
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.3	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.9	502.0	969.6	1133.3
120°	226.6	264.0	491.5	918.9	1081.5
122.5°	239.5	277.0	484.4	868.2	1025.0
125°	259.0	294.9	475.3	800.8	944.7
127.5°	276.3	312.0	470.3	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.6	690.3	788.4
135°	311.9	346.5	462.0	652.3	735.7
137.5°	327.5	358.9	460.3	618.7	688.9
140°	337.0	367.2	459.1	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.7	533.4	566.2
150°	387.0	405.7	454.7	521.5	547.4
152.5°	395.2	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.1
157.5°	419.6	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.5
162.5°	433.8	441.5	454.4	478.1	484.4
165°	441.4	447.2	454.7	473.8	475.3
167.5°	449.4	452.2	456.1	468.8	470.0
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.1	455.8	456.1	464.1	464.1
175°	457.6	459.1	456.1	462.0	460.6
177.5°	458.8	458.8	455.3	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)