

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: P518923

Luminaire Tested: **SQ4-BB-150U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518923
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

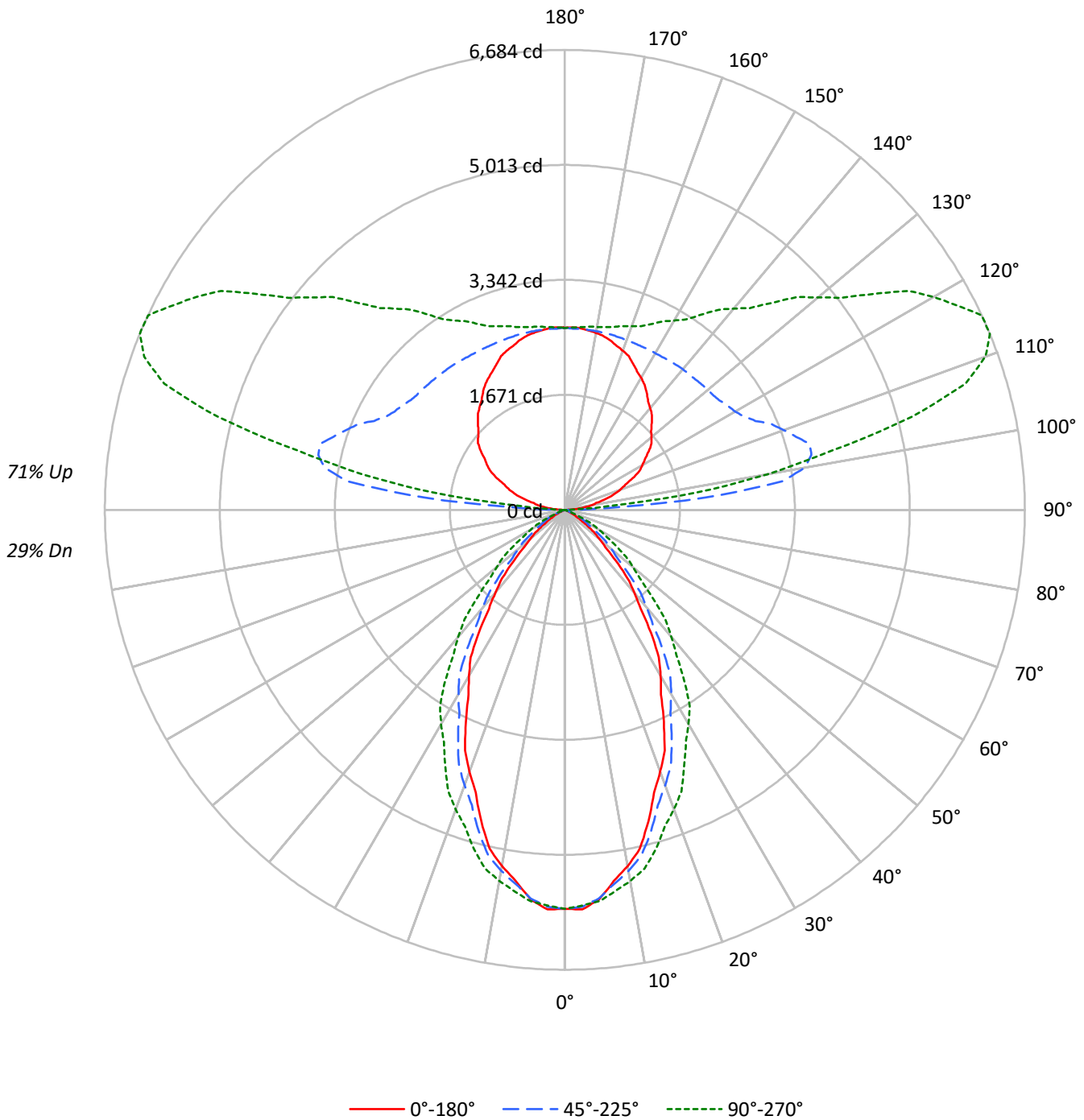
Lumens per Lamp: N/A
Luminaire Lumens: 23980.8 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 223.7
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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17834	17834	17834
5°	17546	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12452	13927
30°	9883	10968	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	306	1306	1756
70°	151	404	504
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	529.2	2.2
10°-20°	1353.3	5.6
20°-30°	1694.2	7.1
30°-40°	1564.9	6.5
40°-50°	1051.5	4.4
50°-60°	543.1	2.3
60°-70°	170.1	0.7
70°-80°	10.7	0.0
80°-90°	5.7	0.0
90°-100°	1229.6	5.1
100°-110°	3324.5	13.9
110°-120°	3495.2	14.6
120°-130°	2839.1	11.8
130°-140°	2227.0	9.3
140°-150°	1709.2	7.1
150°-160°	1229.3	5.1
160°-170°	750.9	3.1
170°-180°	253.2	1.1
0°-30°	3576.8	14.9
0°-40°	5141.7	21.4
0°-60°	6736.4	28.1
0°-90°	6922.9	28.9
90°-120°	8049.2	33.6
90°-150°	14824.5	61.8
90°-180°	17058.0	71.1
0°-180°	23980.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5799	5799	5799	5799	5799	
5°	5684	5626	5670	5690	5712	527
15°	4688	4671	4836	4999	5106	1306
25°	3400	3428	3670	3920	4104	1559
35°	2183	2238	2480	2772	3024	1352
45°	1046	1110	1296	1548	1790	822
55°	376	439	567	728	895	351
65°	42	80	180	217	241	71
75°	6	6	3	0	0	8
85°	0	0	0	0	0	1
90°	6	17	37	40	37	13
95°	191	670	2045	1058	629	200
105°	618	955	3688	5440	5217	651
115°	1088	1330	3059	5921	6684	1074
125°	1490	1707	2757	4652	5465	1328
135°	1786	1997	2683	3756	4252	1380
145°	2076	2232	2646	3215	3460	1299
155°	2344	2436	2623	2884	2979	1081
165°	2552	2577	2634	2737	2751	719
175°	2649	2646	2637	2671	2666	251
180°	2646	2646	2646	2646	2646	

TEST NUMBER: P518923

CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5798.8	5798.8	5798.8	5798.8	5798.8
2.5°	5812.2	5757.4	5771.8	5771.5	5756.1
5°	5683.7	5626.1	5669.7	5689.8	5711.8
7.5°	5443.6	5398.6	5482.3	5545.1	5590.6
10°	5257.3	5218.9	5327.4	5413.0	5476.1
12.5°	5041.9	5012.2	5143.4	5260.8	5341.5
15°	4687.8	4671.4	4836.5	4998.8	5105.8
17.5°	4308.5	4308.0	4496.5	4698.0	4827.0
20°	4048.2	4056.4	4258.6	4480.8	4631.7
22.5°	3787.8	3807.0	4022.9	4254.7	4427.5
25°	3400.1	3427.6	3669.5	3920.5	4104.3
27.5°	3027.6	3067.6	3322.1	3583.1	3806.9
30°	2783.0	2829.6	3088.7	3363.3	3593.7
32.5°	2542.8	2598.2	2850.8	3141.2	3376.0
35°	2182.6	2237.5	2480.0	2771.9	3024.2
37.5°	1810.6	1864.4	2101.2	2388.5	2661.2
40°	1568.2	1628.6	1854.4	2132.8	2409.8
42.5°	1348.3	1408.6	1621.0	1894.5	2156.2
45°	1046.4	1109.5	1296.1	1548.5	1789.8
47.5°	796.2	864.7	1028.5	1256.8	1476.8
50°	648.0	716.6	878.1	1079.3	1290.5
52.5°	529.1	595.5	741.2	930.7	1124.4
55°	375.9	439.0	566.7	727.6	894.9
57.5°	259.8	314.1	428.7	562.9	694.1
60°	188.0	240.1	347.9	456.9	563.9
62.5°	125.1	172.8	278.3	361.8	433.7
65°	42.1	80.5	179.5	216.6	241.3
67.5°	21.3	25.7	94.3	99.5	107.7
70°	16.8	16.8	44.9	47.9	56.1
72.5°	12.3	12.3	18.0	23.0	24.7
75°	5.6	5.6	2.8	0.0	0.0
77.5°	2.8	2.8	2.2	0.0	0.0
80°	2.8	2.8	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	3.4	7.4	8.0	7.4
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.7	581.5	252.5	182.8
95°	190.8	669.8	2044.8	1058.2	629.4
97.5°	306.4	768.1	3187.4	2637.8	1937.2
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.8	863.2	3668.1	4496.2	3967.1
105°	618.0	954.9	3688.0	5440.1	5217.4
107.5°	752.4	1059.8	3526.9	6029.0	6103.1
110°	857.2	1135.7	3383.3	6187.1	6501.8



TEST NUMBER: P518923

CATALOG NUMBER: SQ4-BB-150U-100D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	950.6	1211.3	3251.2	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.1	6684.1
117.5°	1222.3	1449.6	2931.6	5562.8	6427.7
120°	1304.3	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.3	5919.7
125°	1489.5	1706.7	2756.8	4652.0	5465.1
127.5°	1588.6	1801.9	2724.9	4343.4	5058.5
130°	1643.2	1863.2	2711.2	4152.7	4798.7
132.5°	1700.2	1918.0	2697.5	3980.7	4575.5
135°	1785.6	1997.3	2682.7	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.6	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.2	3665.8
145°	2076.1	2232.1	2645.7	3215.2	3460.2
147.5°	2156.4	2294.6	2633.2	3092.0	3280.2
150°	2215.7	2338.2	2628.6	3025.1	3175.4
152.5°	2270.4	2377.3	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.2	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.4	2516.4	2625.8	2794.8	2839.4
162.5°	2497.6	2541.6	2628.1	2767.2	2800.6
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.8	2606.0	2634.9	2711.4	2718.0
170°	2611.5	2619.9	2637.2	2699.8	2699.8
172.5°	2629.8	2631.4	2637.2	2686.1	2683.9
175°	2648.6	2645.8	2637.2	2671.2	2665.6
177.5°	2654.8	2648.1	2636.6	2659.2	2652.5
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)