

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: P518947

Luminaire Tested: **SQ4-BB-150U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518947  
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-125D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

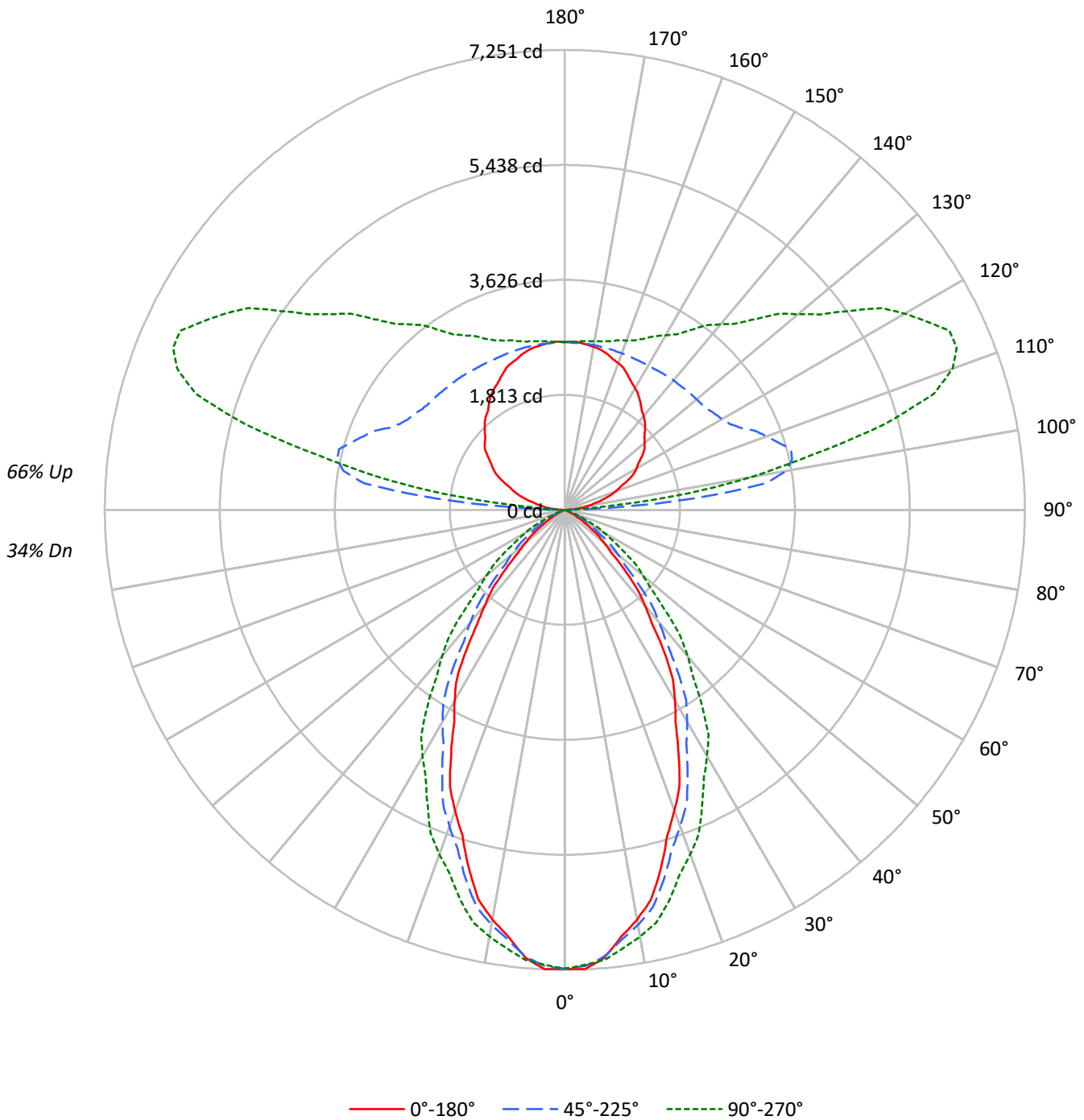
Lumens per Lamp: N/A  
Luminaire Lumens: 25693.3 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 256.3  
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18620	19211	20281
20°	16528	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9287	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2190
70°	189	504	629
75°	83	42	0
80°	62	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	660.2	2.6
10°-20°	1688.4	6.6
20°-30°	2113.7	8.2
30°-40°	1952.3	7.6
40°-50°	1311.9	5.1
50°-60°	677.6	2.6
60°-70°	212.2	0.8
70°-80°	13.4	0.1
80°-90°	5.8	0.0
90°-100°	1229.6	4.8
100°-110°	3324.5	12.9
110°-120°	3495.2	13.6
120°-130°	2839.1	11.0
130°-140°	2227.0	8.7
140°-150°	1709.2	6.7
150°-160°	1229.3	4.8
160°-170°	750.9	2.9
170°-180°	253.2	1.0
0°-30°	4462.2	17.4
0°-40°	6414.5	25.0
0°-60°	8404.0	32.7
0°-90°	8635.4	33.6
90°-120°	8049.2	31.3
90°-150°	14824.5	57.7
90°-180°	17058.0	66.4
0°-180°	25693.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7234	7234	7234	7234	7234	
5°	7091	7019	7073	7098	7126	657
15°	5848	5828	6034	6236	6370	1629
25°	4242	4276	4578	4891	5120	1945
35°	2723	2791	3094	3458	3773	1687
45°	1306	1384	1617	1932	2233	1025
55°	469	548	707	908	1116	438
65°	52	100	224	270	301	89
75°	7	7	4	0	0	10
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7234.3	7234.3	7234.3	7234.3	7234.3
2.5°	7251.1	7182.6	7200.7	7200.2	7181.1
5°	7090.8	7018.9	7073.3	7098.4	7125.8
7.5°	6791.2	6735.1	6839.5	6917.8	6974.6
10°	6558.8	6510.9	6646.3	6753.1	6831.8
12.5°	6290.0	6253.1	6416.7	6563.2	6663.8
15°	5848.3	5827.8	6033.8	6236.3	6369.8
17.5°	5375.1	5374.5	5609.6	5861.1	6021.9
20°	5050.3	5060.6	5312.8	5590.1	5778.3
22.5°	4725.6	4749.5	5018.8	5307.9	5523.5
25°	4241.9	4276.1	4577.9	4891.1	5120.3
27.5°	3777.1	3827.0	4144.6	4470.1	4749.4
30°	3471.9	3530.1	3853.4	4195.9	4483.4
32.5°	3172.3	3241.4	3556.6	3918.8	4211.8
35°	2722.9	2791.4	3093.9	3458.1	3772.9
37.5°	2258.8	2325.9	2621.4	2979.8	3320.0
40°	1956.4	2031.7	2313.4	2660.8	3006.4
42.5°	1682.0	1757.3	2022.2	2363.5	2690.0
45°	1305.5	1384.2	1617.0	1931.8	2232.9
47.5°	993.3	1078.8	1283.1	1567.9	1842.3
50°	808.5	894.0	1095.5	1346.4	1610.0
52.5°	660.1	742.9	924.7	1161.2	1402.8
55°	469.0	547.7	707.0	907.7	1116.5
57.5°	324.1	391.8	534.8	702.3	865.9
60°	234.5	299.5	434.0	570.0	703.5
62.5°	156.1	215.6	347.2	451.4	541.1
65°	52.5	100.4	224.0	270.2	301.0
67.5°	26.6	32.1	117.6	124.1	134.4
70°	21.0	21.0	56.0	59.7	70.0
72.5°	15.4	15.4	22.4	28.7	30.8
75°	7.0	7.0	3.5	0.0	0.0
77.5°	3.5	3.5	2.8	0.0	0.0
80°	3.5	3.5	0.0	0.0	0.0
82.5°	0.7	0.7	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

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**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)