

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: P518855

Luminaire Tested: **SQ4-BB-125U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518855  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-125D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

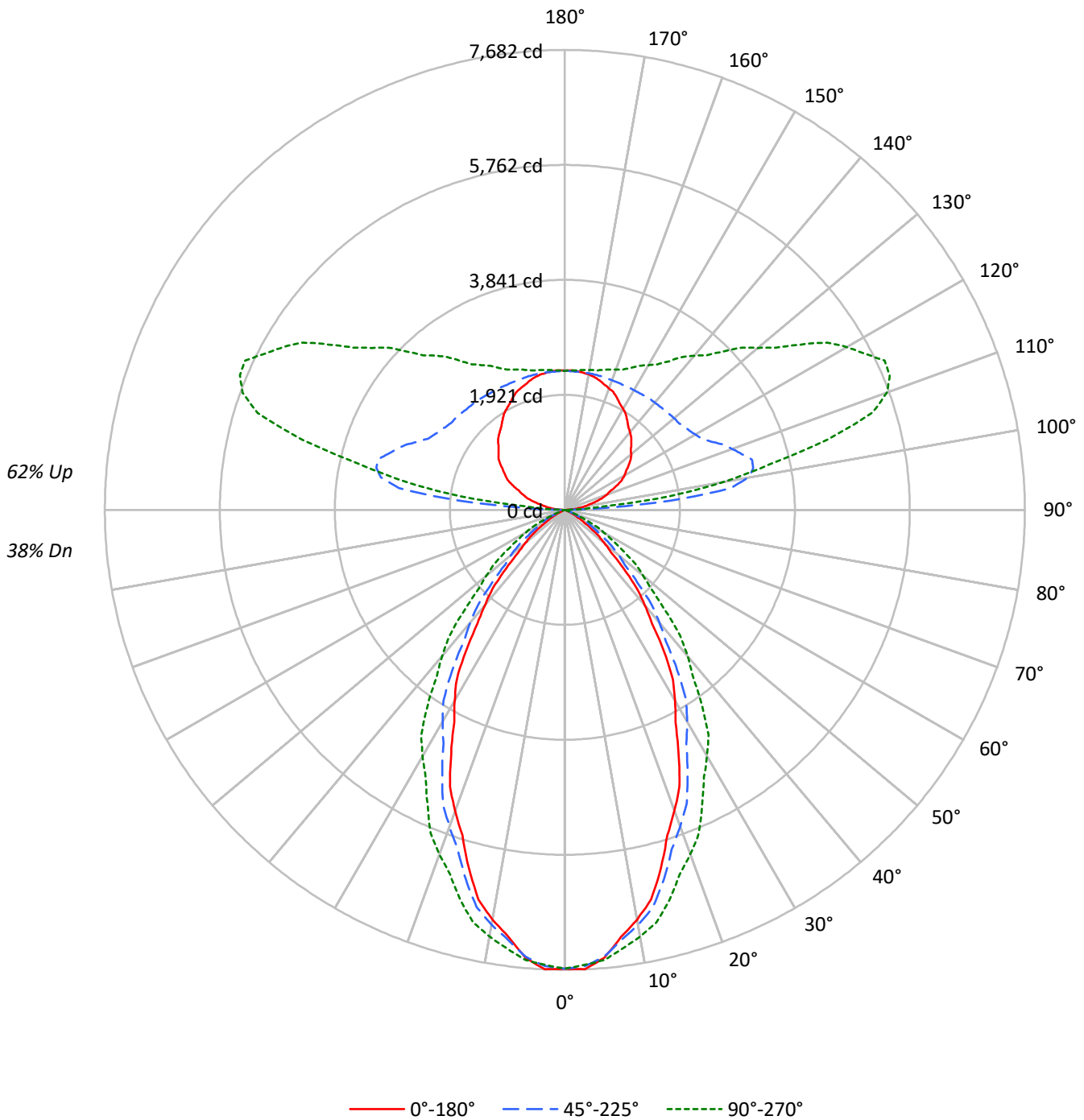
Lumens per Lamp: N/A  
Luminaire Lumens: 24146.3 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 233.8  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	38	36	33	31	29	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	39	32	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

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

	0°	45°	90°
0°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16458	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7451	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	533	667
75°	88	44	0
80°	66	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	699.5	2.9
10°-20°	1788.7	7.4
20°-30°	2239.3	9.3
30°-40°	2068.4	8.6
40°-50°	1389.8	5.8
50°-60°	717.9	3.0
60°-70°	224.8	0.9
70°-80°	14.2	0.1
80°-90°	5.7	0.0
90°-100°	1086.8	4.5
100°-110°	2927.6	12.1
110°-120°	3072.5	12.7
120°-130°	2493.2	10.3
130°-140°	1955.4	8.1
140°-150°	1501.2	6.2
150°-160°	1079.4	4.5
160°-170°	659.4	2.7
170°-180°	222.4	0.9
0°-30°	4727.5	19.6
0°-40°	6795.8	28.1
0°-60°	8903.5	36.9
0°-90°	9148.3	37.9
90°-120°	7086.9	29.4
90°-150°	13036.8	54.0
90°-180°	14998.0	62.1
0°-180°	24146.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7664	7664	7664	7664	7664	
5°	7512	7436	7494	7520	7549	696
15°	6196	6174	6392	6607	6748	1726
25°	4494	4530	4850	5182	5425	2060
35°	2885	2957	3278	3664	3997	1787
45°	1383	1466	1713	2047	2366	1086
55°	497	580	749	962	1183	464
65°	56	106	237	286	319	94
75°	7	7	4	0	0	11
85°	0	0	0	0	0	1
90°	6	18	36	38	38	12
95°	166	591	1782	911	630	173
105°	542	843	3238	4844	4546	569
115°	956	1170	2696	5210	5892	941
125°	1305	1499	2421	4092	4815	1165
135°	1572	1754	2353	3301	3738	1213
145°	1817	1959	2323	2822	3031	1140
155°	2063	2138	2302	2532	2613	950
165°	2237	2264	2311	2403	2415	631
175°	2326	2323	2314	2347	2341	221
180°	2323	2323	2323	2323	2323	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7664.3	7664.3	7664.3	7664.3	7664.3
2.5°	7682.1	7609.6	7628.7	7628.3	7607.9
5°	7512.3	7436.1	7493.7	7520.4	7549.4
7.5°	7194.9	7135.4	7246.1	7329.0	7389.2
10°	6948.7	6897.9	7041.4	7154.5	7237.9
12.5°	6663.9	6624.8	6798.1	6953.3	7059.9
15°	6196.0	6174.2	6392.5	6607.1	6748.4
17.5°	5694.7	5693.9	5943.1	6209.5	6379.9
20°	5350.6	5361.4	5628.7	5922.4	6121.8
22.5°	5006.5	5031.8	5317.2	5623.5	5851.9
25°	4494.0	4530.3	4850.0	5181.8	5424.7
27.5°	4001.6	4054.5	4390.9	4735.8	5031.7
30°	3678.3	3739.9	4082.4	4445.3	4749.9
32.5°	3360.9	3434.1	3768.0	4151.8	4462.1
35°	2884.8	2957.3	3277.8	3663.6	3997.2
37.5°	2393.1	2464.2	2777.2	3157.0	3517.4
40°	2072.7	2152.5	2450.9	2818.9	3185.1
42.5°	1782.0	1861.8	2142.4	2504.0	2849.9
45°	1383.1	1466.4	1713.1	2046.6	2365.7
47.5°	1052.3	1143.0	1359.3	1661.1	1951.9
50°	856.5	947.2	1160.6	1426.5	1705.7
52.5°	699.3	787.1	979.6	1230.2	1486.1
55°	496.9	580.3	749.0	961.7	1182.8
57.5°	343.4	415.1	566.6	744.0	917.3
60°	248.4	317.3	459.8	603.9	745.3
62.5°	165.4	228.5	367.8	478.3	573.2
65°	55.6	106.4	237.3	286.3	318.9
67.5°	28.2	34.0	124.6	131.5	142.4
70°	22.2	22.2	59.3	63.3	74.2
72.5°	16.3	16.3	23.7	30.5	32.6
75°	7.4	7.4	3.7	0.0	0.0
77.5°	3.7	3.7	3.0	0.0	0.0
80°	3.7	3.7	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°	1.2	3.5	7.1	7.7	7.7
90°	5.9	17.5	35.5	38.5	38.5
92.5°	72.2	255.1	504.3	242.8	168.7
95°	165.7	591.1	1781.7	911.1	630.4
97.5°	264.6	676.7	2794.4	2334.5	1760.3
100°	340.3	710.8	3116.4	3260.6	2705.0
102.5°	413.7	758.7	3223.0	3954.3	3498.2
105°	541.6	842.6	3237.8	4843.9	4545.9
107.5°	662.3	930.9	3099.8	5301.1	5378.1
110°	742.8	997.5	2974.4	5443.1	5723.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	828.1	1064.2	2853.6	5411.7	5873.0
115°	955.9	1170.1	2696.2	5209.5	5892.5
117.5°	1072.5	1273.4	2574.2	4886.9	5647.4
120°	1148.3	1342.2	2512.7	4655.4	5436.7
122.5°	1214.6	1406.2	2467.7	4418.6	5197.6
125°	1305.2	1499.1	2420.9	4091.8	4815.2
127.5°	1392.2	1583.2	2391.3	3803.5	4449.4
130°	1444.3	1635.3	2379.5	3638.4	4205.5
132.5°	1496.4	1685.0	2367.6	3492.9	4013.8
135°	1571.5	1753.8	2352.9	3301.0	3737.9
137.5°	1643.1	1817.9	2345.2	3138.2	3497.0
140°	1692.9	1860.7	2338.1	3038.0	3362.1
142.5°	1745.0	1901.2	2333.3	2944.5	3217.6
145°	1817.2	1959.0	2323.3	2822.2	3030.6
147.5°	1895.3	2018.6	2313.2	2719.4	2883.2
150°	1947.4	2054.5	2308.5	2654.9	2790.9
152.5°	1994.7	2087.9	2306.1	2602.2	2712.7
155°	2062.8	2138.1	2302.5	2532.3	2613.3
157.5°	2122.6	2181.1	2303.1	2483.1	2537.5
160°	2160.5	2209.7	2305.5	2454.4	2494.9
162.5°	2193.6	2233.6	2307.9	2430.5	2459.4
165°	2237.4	2263.5	2311.4	2403.4	2415.0
167.5°	2272.9	2288.0	2314.4	2382.6	2387.2
170°	2296.6	2302.4	2314.4	2370.6	2370.6
172.5°	2310.8	2312.0	2316.7	2358.8	2358.8
175°	2326.2	2323.3	2314.4	2346.8	2341.0
177.5°	2332.7	2328.1	2316.2	2335.0	2330.4
180°	2323.3	2323.3	2323.3	2323.3	2323.3

(END OF REPORT)