

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: P518859

Luminaire Tested: **SQ4-BB-125U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518859  
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-840-1D-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

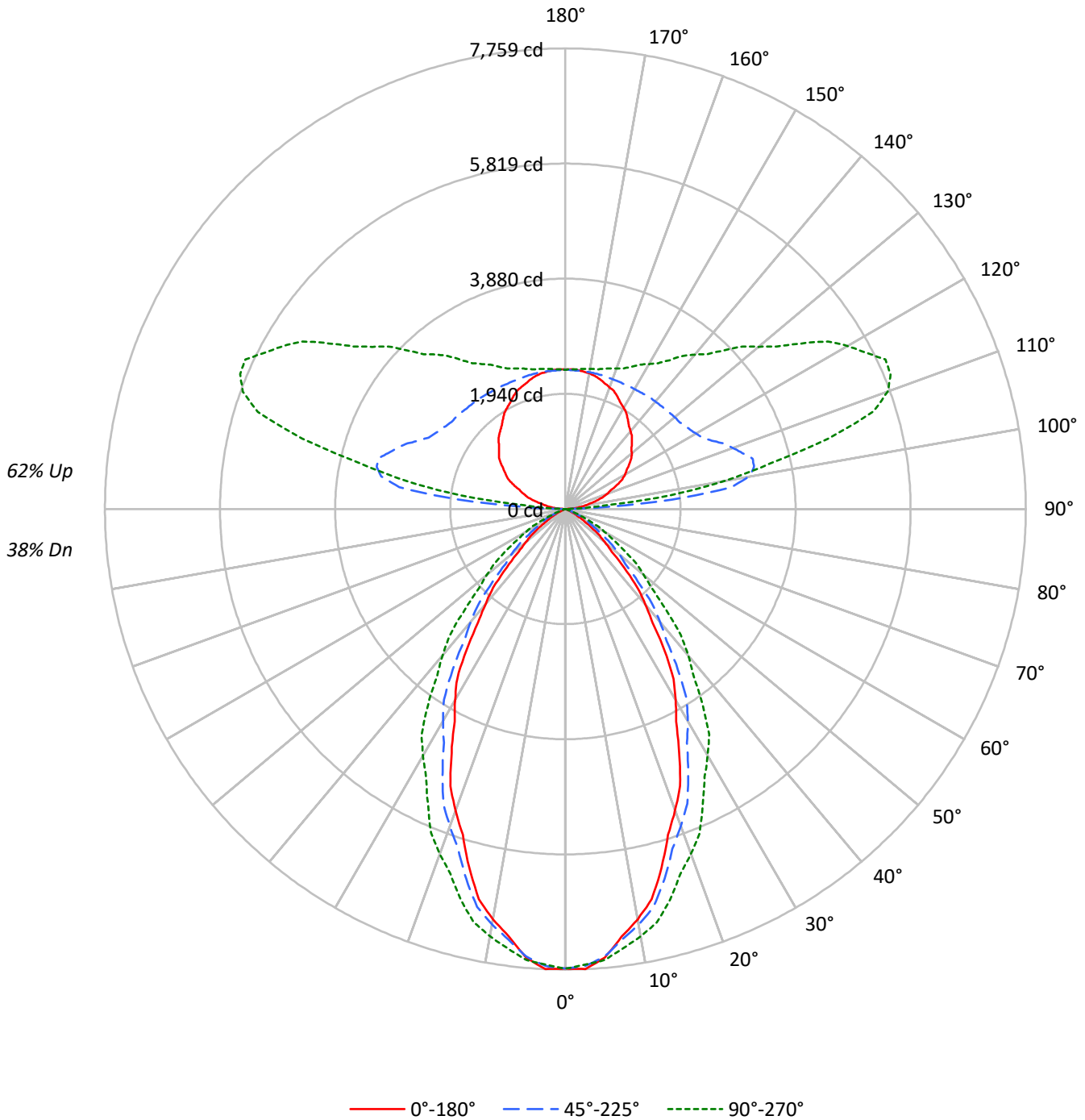
Lumens per Lamp: N/A  
Luminaire Lumens: 24389.3 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

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°	23808	23808	23808
5°	23425	23367	23540
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4056	6406
60°	1543	2856	4630
65°	409	1744	2344
70°	202	539	673
75°	89	44	0
80°	66	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	706.5	2.9
10°-20°	1806.7	7.4
20°-30°	2261.8	9.3
30°-40°	2089.2	8.6
40°-50°	1403.8	5.8
50°-60°	725.1	3.0
60°-70°	227.1	0.9
70°-80°	14.4	0.1
80°-90°	5.8	0.0
90°-100°	1097.8	4.5
100°-110°	2957.1	12.1
110°-120°	3103.4	12.7
120°-130°	2518.3	10.3
130°-140°	1975.0	8.1
140°-150°	1516.3	6.2
150°-160°	1090.2	4.5
160°-170°	666.1	2.7
170°-180°	224.6	0.9
0°-30°	4775.0	19.6
0°-40°	6864.2	28.1
0°-60°	8993.1	36.9
0°-90°	9240.4	37.9
90°-120°	7158.3	29.4
90°-150°	13168.0	54.0
90°-180°	15149.0	62.1
0°-180°	24389.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7741	7741	7741	7741	7741	
5°	7588	7511	7569	7596	7625	703
15°	6258	6236	6457	6674	6816	1743
25°	4539	4576	4899	5234	5479	2081
35°	2914	2987	3311	3700	4037	1805
45°	1397	1481	1730	2067	2390	1097
55°	502	586	756	971	1195	468
65°	56	107	240	289	322	95
75°	8	8	4	0	0	11
85°	0	0	0	0	0	1
90°	6	18	36	39	39	12
95°	167	597	1800	920	637	175
105°	547	851	3270	4893	4592	575
115°	966	1182	2723	5262	5952	950
125°	1318	1514	2445	4133	4864	1177
135°	1587	1772	2376	3334	3776	1225
145°	1836	1979	2347	2851	3061	1151
155°	2084	2160	2326	2558	2640	959
165°	2260	2286	2335	2428	2439	637
175°	2350	2347	2338	2370	2365	223
180°	2347	2347	2347	2347	2347	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7741.4	7741.4	7741.4	7741.4	7741.4
2.5°	7759.4	7686.2	7705.5	7705.0	7684.5
5°	7587.9	7511.0	7569.1	7596.0	7625.3
7.5°	7267.3	7207.2	7319.0	7402.7	7463.5
10°	7018.6	6967.3	7112.2	7226.5	7310.7
12.5°	6731.0	6691.4	6866.5	7023.3	7131.0
15°	6258.3	6236.3	6456.8	6673.5	6816.4
17.5°	5752.0	5751.2	6002.9	6272.0	6444.1
20°	5404.4	5415.4	5685.3	5982.0	6183.4
22.5°	5056.8	5082.5	5370.7	5680.0	5910.8
25°	4539.2	4575.9	4898.8	5233.9	5479.3
27.5°	4041.9	4095.3	4435.1	4783.5	5082.3
30°	3715.3	3777.5	4123.5	4490.1	4797.7
32.5°	3394.7	3468.7	3805.9	4193.6	4507.0
35°	2913.8	2987.0	3310.8	3700.5	4037.4
37.5°	2417.2	2489.0	2805.2	3188.7	3552.7
40°	2093.6	2174.2	2475.6	2847.3	3217.2
42.5°	1800.0	1880.5	2164.0	2529.2	2878.6
45°	1397.0	1481.2	1730.3	2067.2	2389.5
47.5°	1062.9	1154.5	1373.0	1677.8	1971.5
50°	865.2	956.7	1172.3	1440.8	1722.8
52.5°	706.4	795.0	989.5	1242.6	1501.1
55°	501.9	586.1	756.5	971.4	1194.7
57.5°	346.8	419.3	572.3	751.5	926.6
60°	250.9	320.5	464.4	610.0	752.8
62.5°	167.0	230.8	371.5	483.1	579.0
65°	56.2	107.4	239.7	289.1	322.1
67.5°	28.5	34.3	125.8	132.8	143.8
70°	22.5	22.5	59.9	63.9	74.9
72.5°	16.5	16.5	24.0	30.8	33.0
75°	7.5	7.5	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	7.2	7.8	7.8
90°	6.0	17.7	35.9	38.9	38.9
92.5°	72.9	257.7	509.4	245.2	170.4
95°	167.4	597.1	1799.6	920.3	636.7
97.5°	267.2	683.5	2822.5	2358.0	1778.1
100°	343.8	717.9	3147.8	3293.5	2732.3
102.5°	417.9	766.3	3255.4	3994.1	3533.4
105°	547.0	851.0	3270.3	4892.7	4591.6
107.5°	669.0	940.3	3131.0	5354.5	5432.2
110°	750.3	1007.5	3004.3	5497.9	5781.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	836.4	1074.9	2882.3	5466.1	5932.0
115°	965.6	1181.9	2723.3	5262.0	5951.8
117.5°	1083.3	1286.2	2600.1	4936.1	5704.3
120°	1159.9	1355.7	2538.0	4702.2	5491.4
122.5°	1226.8	1420.3	2492.5	4463.0	5249.9
125°	1318.3	1514.1	2445.3	4132.9	4863.7
127.5°	1406.2	1599.1	2415.4	3841.8	4494.2
130°	1458.8	1651.7	2403.4	3675.0	4247.9
132.5°	1511.4	1702.0	2391.5	3528.0	4054.1
135°	1587.3	1771.5	2376.5	3334.2	3775.5
137.5°	1659.7	1836.2	2368.8	3169.8	3532.2
140°	1709.9	1879.4	2361.6	3068.5	3395.9
142.5°	1762.5	1920.4	2356.8	2974.1	3250.0
145°	1835.5	1978.7	2346.6	2850.6	3061.1
147.5°	1914.4	2038.9	2336.5	2746.8	2912.2
150°	1967.0	2075.1	2331.7	2681.6	2818.9
152.5°	2014.8	2108.9	2329.3	2628.4	2740.0
155°	2083.6	2159.6	2325.7	2557.7	2639.6
157.5°	2144.0	2203.0	2326.3	2508.1	2563.1
160°	2182.2	2231.9	2328.7	2479.1	2520.0
162.5°	2215.7	2256.0	2331.1	2454.9	2484.1
165°	2259.9	2286.2	2334.7	2427.6	2439.3
167.5°	2295.8	2311.0	2337.7	2406.5	2411.2
170°	2319.7	2325.6	2337.7	2394.5	2394.5
172.5°	2334.1	2335.2	2340.1	2382.5	2382.5
175°	2349.6	2346.7	2337.7	2370.4	2364.6
177.5°	2356.2	2351.5	2339.5	2358.5	2353.8
180°	2346.6	2346.6	2346.6	2346.6	2346.6

(END OF REPORT)