

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: P519459

Luminaire Tested: **SQ4-WB-125U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519459  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-125U-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

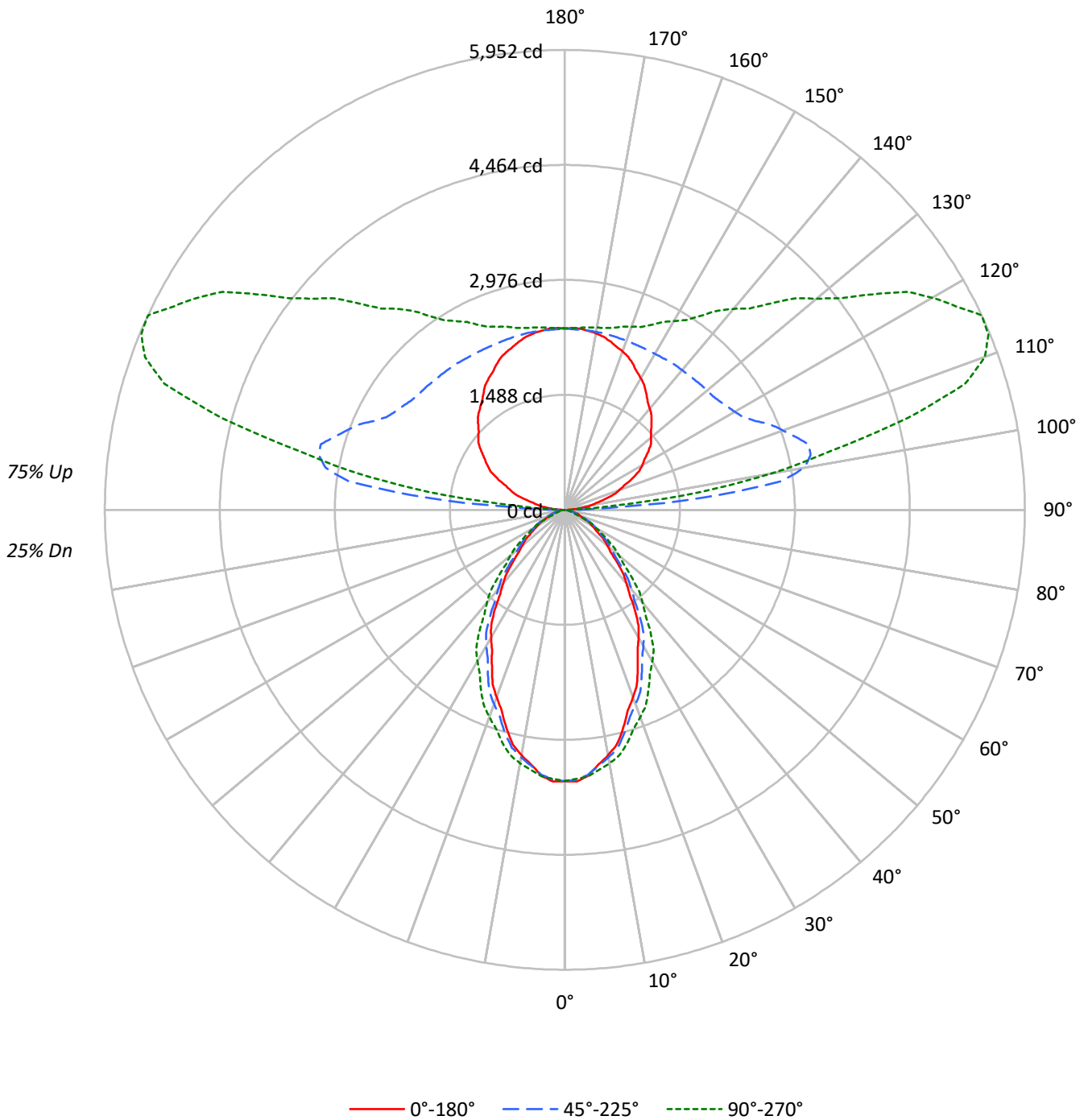
Lumens per Lamp: N/A  
Luminaire Lumens: 20270.3 lumens  
Efficiency: N/A  
Efficacy: 138.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 146.4  
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				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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	93	89	85	82	83	79	76	74	62	60	58	45	44	43	30	30	29	22
2	85	78	73	68	76	70	65	62	55	52	49	41	39	37	27	26	26	20
3	78	69	63	57	69	62	57	52	49	45	42	36	34	32	25	24	22	17
4	71	62	54	49	64	55	49	45	44	39	36	33	30	28	23	21	20	16
5	66	55	48	42	59	50	43	38	39	35	31	30	27	24	21	19	18	14
6	61	49	42	37	54	45	38	34	36	31	28	27	24	22	19	17	16	13
7	56	45	37	32	50	40	34	30	32	28	24	25	22	19	17	16	14	11
8	52	41	33	29	46	37	31	26	30	25	22	23	20	17	16	14	13	10
9	48	37	30	25	43	34	28	23	27	23	20	21	18	16	15	13	12	10
10	45	34	27	23	41	31	25	21	25	21	18	19	16	14	14	12	11	9

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

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7988	8704
30°	6772	7216	8042
35°	5923	6351	7258
40°	4985	5380	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2916	3213	3610
60°	2492	2786	2880
65°	1984	2343	1861
70°	1759	1828	1136
75°	1629	1483	695
80°	1500	1364	600
85°	1359	1249	490



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.0	1.6
10°-20°	837.6	4.1
20°-30°	1084.9	5.4
30°-40°	1062.4	5.2
40°-50°	813.2	4.0
50°-60°	541.9	2.7
60°-70°	295.7	1.5
70°-80°	123.2	0.6
80°-90°	40.4	0.2
90°-100°	1097.8	5.4
100°-110°	2957.1	14.6
110°-120°	3103.4	15.3
120°-130°	2518.3	12.4
130°-140°	1975.0	9.7
140°-150°	1516.3	7.5
150°-160°	1090.2	5.4
160°-170°	666.1	3.3
170°-180°	224.6	1.1
0°-30°	2244.5	11.1
0°-40°	3307.0	16.3
0°-60°	4662.1	23.0
0°-90°	5121.4	25.3
90°-120°	7158.3	35.3
90°-150°	13168.0	65.0
90°-180°	15149.0	74.7
0°-180°	20270.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3511	3511	3511	3511	3511	
5°	3454	3419	3442	3450	3462	321
15°	2921	2910	2989	3070	3123	816
25°	2232	2238	2354	2456	2565	1027
35°	1578	1585	1692	1805	1933	981
45°	946	964	1028	1105	1206	738
55°	544	566	599	622	673	493
65°	273	295	322	281	256	283
75°	137	137	125	86	58	146
85°	38	38	35	23	14	42
90°	6	18	36	39	39	14
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°	3510.8	3510.8	3510.8	3510.8	3510.8
2.5°	3519.4	3488.1	3496.0	3495.8	3486.1
5°	3453.8	3419.2	3441.5	3449.5	3461.5
7.5°	3325.6	3299.4	3340.1	3370.2	3394.6
10°	3225.8	3203.2	3255.1	3298.9	3330.6
12.5°	3110.0	3091.0	3155.2	3214.1	3255.4
15°	2920.8	2910.2	2988.6	3069.9	3122.6
17.5°	2718.4	2713.2	2803.1	2898.0	2965.5
20°	2580.3	2578.8	2677.4	2776.2	2854.5
22.5°	2441.1	2444.4	2548.0	2650.8	2739.9
25°	2232.2	2238.2	2353.9	2456.5	2564.9
27.5°	2039.0	2041.7	2161.3	2269.6	2385.3
30°	1907.1	1914.7	2031.9	2144.0	2264.5
32.5°	1775.3	1784.0	1898.8	2014.7	2137.6
35°	1577.5	1585.0	1691.5	1805.3	1933.3
37.5°	1373.5	1383.8	1478.3	1585.9	1711.8
40°	1241.6	1256.7	1340.2	1441.6	1565.1
42.5°	1114.7	1133.4	1210.8	1307.0	1418.5
45°	945.9	963.9	1027.5	1105.3	1206.2
47.5°	800.4	821.2	870.1	937.0	1023.2
50°	717.9	737.5	782.6	832.2	913.5
52.5°	645.2	664.7	704.9	743.2	812.5
55°	543.8	566.4	599.3	622.0	673.2
57.5°	460.6	482.3	508.4	518.6	549.6
60°	405.2	429.3	452.9	451.7	468.3
62.5°	354.6	375.1	398.7	382.4	383.3
65°	272.7	295.3	322.0	281.3	255.7
67.5°	220.3	225.1	252.6	196.2	165.8
70°	195.6	195.6	203.3	151.9	126.3
72.5°	172.2	172.2	165.1	123.6	96.7
75°	137.1	137.1	124.8	85.7	58.5
77.5°	105.7	104.5	95.5	63.9	42.5
80°	84.7	84.7	77.0	50.5	33.9
82.5°	66.2	66.2	59.8	39.4	25.3
85°	38.5	38.5	35.4	22.9	13.9
87.5°	14.8	17.1	19.5	15.1	13.9
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)