

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: P519607

Luminaire Tested: **SQ4-WB-150U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519607  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

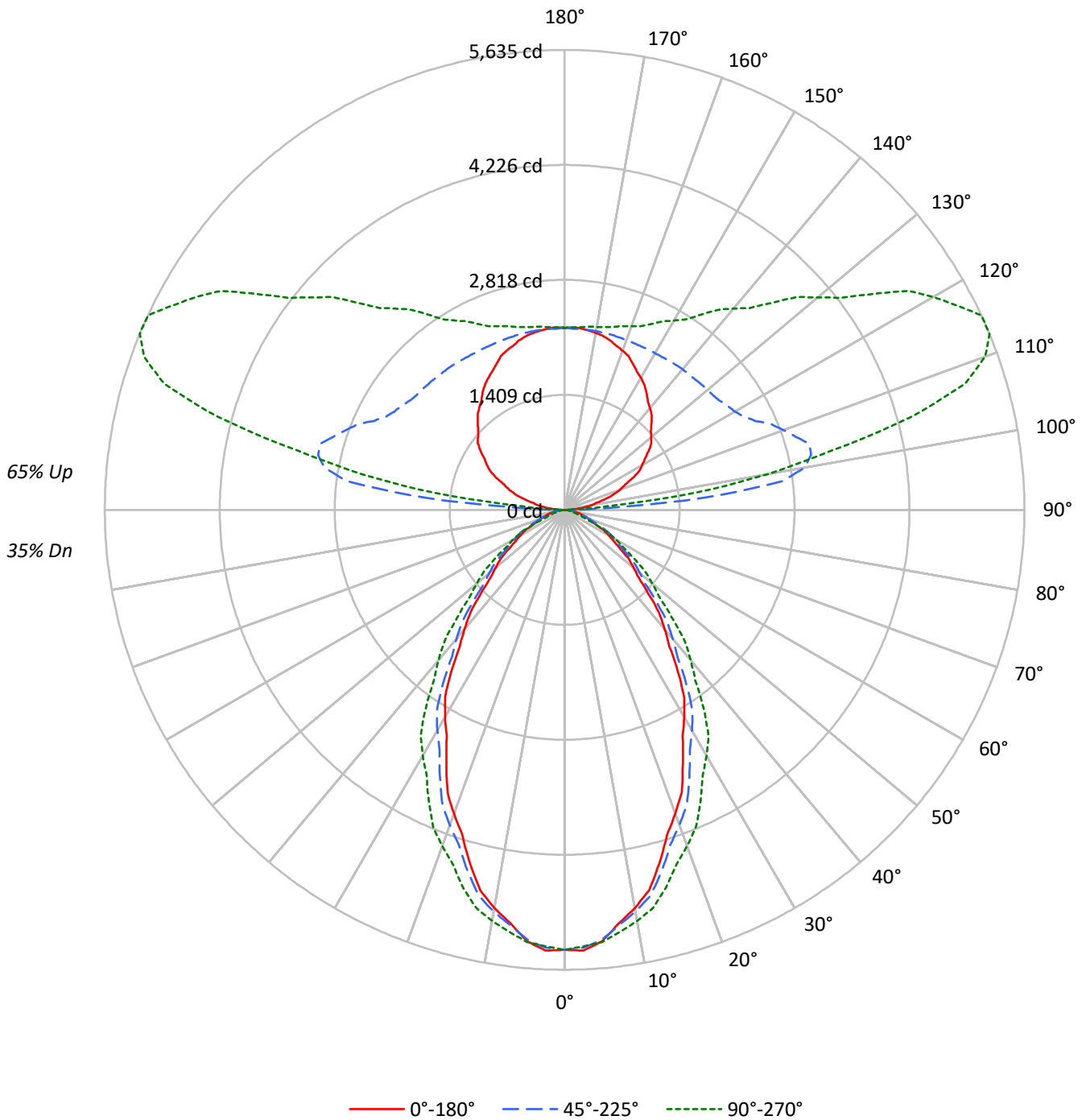
Lumens per Lamp: N/A  
Luminaire Lumens: 22240.4 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38	31
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33	28
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29	24
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26	22
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23	20
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21	18
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19	16
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17	15
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16	13
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12

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

	0°	45°	90°
0°	16578	16578	16578
5°	16371	16313	16408
10°	15467	15608	15970
15°	14278	14610	15265
20°	12966	13454	14344
25°	11630	12264	13364
30°	10399	11079	12347
35°	9093	9750	11145
40°	7654	8261	9648
45°	6316	6862	8055
50°	5273	5749	6711
55°	4477	4933	5542
60°	3826	4277	4423
65°	3047	3598	2857
70°	2701	2807	1744
75°	2501	2277	1068
80°	2304	2095	921
85°	2085	1920	752



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	494.4	2.2
10°-20°	1286.1	5.8
20°-30°	1665.8	7.5
30°-40°	1631.3	7.3
40°-50°	1248.6	5.6
50°-60°	832.0	3.7
60°-70°	454.0	2.0
70°-80°	189.2	0.9
80°-90°	58.2	0.3
90°-100°	1036.6	4.7
100°-110°	2802.7	12.6
110°-120°	2946.7	13.2
120°-130°	2393.5	10.8
130°-140°	1877.5	8.4
140°-150°	1441.0	6.5
150°-160°	1036.3	4.7
160°-170°	633.1	2.8
170°-180°	213.4	1.0
0°-30°	3446.3	15.5
0°-40°	5077.6	22.8
0°-60°	7158.2	32.2
0°-90°	7859.7	35.3
90°-120°	6786.0	30.5
90°-150°	12497.9	56.2
90°-180°	14381.0	64.7
0°-180°	22240.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5391	5391	5391	5391	5391	
5°	5303	5250	5284	5296	5315	493
15°	4485	4468	4589	4714	4794	1252
25°	3427	3437	3614	3772	3938	1576
35°	2422	2434	2597	2772	2968	1506
45°	1452	1480	1578	1697	1852	1133
55°	835	870	920	955	1034	757
65°	419	453	494	432	393	435
75°	210	210	192	132	90	225
85°	59	59	54	35	21	64
90°	5	14	31	34	31	14
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4398	549
115°	917	1121	2579	4992	5635	906
125°	1256	1439	2324	3922	4607	1119
135°	1505	1684	2262	3167	3585	1163
145°	1750	1882	2230	2711	2917	1095
155°	1976	2054	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2230	2223	2252	2247	212
180°	2230	2230	2230	2230	2230	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5390.6	5390.6	5390.6	5390.6	5390.6
2.5°	5403.8	5355.7	5367.9	5367.5	5352.7
5°	5303.0	5249.8	5284.1	5296.4	5314.9
7.5°	5106.2	5066.0	5128.5	5174.7	5212.2
10°	4953.0	4918.3	4997.9	5065.2	5113.8
12.5°	4775.1	4746.0	4844.6	4935.0	4998.4
15°	4484.6	4468.5	4588.7	4713.6	4794.5
17.5°	4173.8	4166.0	4303.9	4449.6	4553.2
20°	3961.9	3959.6	4110.9	4262.7	4382.9
22.5°	3748.1	3753.2	3912.2	4070.0	4207.0
25°	3427.3	3436.6	3614.2	3771.7	3938.3
27.5°	3130.7	3134.9	3318.5	3484.8	3662.5
30°	2928.3	2939.8	3119.9	3292.0	3477.0
32.5°	2725.8	2739.2	2915.5	3093.4	3282.1
35°	2422.1	2433.6	2597.1	2771.9	2968.5
37.5°	2108.9	2124.6	2269.8	2435.0	2628.3
40°	1906.4	1929.6	2057.8	2213.5	2403.2
42.5°	1711.5	1740.2	1859.1	2006.8	2178.0
45°	1452.3	1480.1	1577.7	1697.1	1852.0
47.5°	1229.0	1260.9	1335.9	1438.8	1571.0
50°	1102.2	1132.3	1201.6	1277.7	1402.6
52.5°	990.6	1020.7	1082.4	1141.1	1247.5
55°	835.0	869.6	920.1	955.0	1033.6
57.5°	707.2	740.5	780.6	796.3	843.9
60°	622.1	659.1	695.4	693.6	719.1
62.5°	544.5	575.9	612.1	587.1	588.5
65°	418.7	453.4	494.4	432.0	392.6
67.5°	338.2	345.6	387.9	301.2	254.5
70°	300.4	300.4	312.2	233.3	194.0
72.5°	264.4	264.4	253.6	189.7	148.5
75°	210.5	210.5	191.6	131.5	89.9
77.5°	162.3	160.4	146.6	98.1	65.3
80°	130.1	130.1	118.3	77.5	52.0
82.5°	101.7	101.7	91.8	60.5	38.8
85°	59.1	59.1	54.4	35.2	21.3
87.5°	21.8	23.7	25.2	18.0	15.7
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.8	154.1
95°	160.9	564.7	1723.9	892.1	530.6
97.5°	258.3	647.6	2687.1	2223.8	1633.1
100°	331.3	681.1	2986.8	3114.9	2518.6
102.5°	398.6	727.7	3092.4	3790.6	3344.5
105°	521.0	805.1	3109.2	4586.4	4398.5
107.5°	634.3	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.3	5216.1	5481.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	801.4	1021.2	2740.9	5189.5	5635.0
115°	917.2	1121.4	2578.6	4991.8	5635.0
117.5°	1030.5	1222.1	2471.5	4689.8	5419.0
120°	1099.6	1287.4	2408.2	4473.1	5217.3
122.5°	1164.9	1349.0	2369.7	4240.8	4990.6
125°	1255.7	1438.8	2324.1	3921.9	4607.4
127.5°	1339.3	1519.1	2297.2	3661.7	4264.6
130°	1385.4	1570.8	2285.7	3501.0	4045.6
132.5°	1433.4	1617.0	2274.2	3355.9	3857.4
135°	1505.4	1683.8	2261.7	3166.8	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.8	1785.1	2247.3	2914.4	3217.3
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.6	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.4
150°	1867.9	1971.2	2216.1	2550.3	2677.1
152.5°	1914.0	2004.2	2214.2	2497.9	2602.2
155°	1976.0	2053.5	2211.3	2431.6	2511.4
157.5°	2040.3	2094.3	2211.8	2385.3	2437.9
160°	2076.8	2121.4	2213.7	2356.2	2393.8
162.5°	2105.6	2142.7	2215.6	2332.9	2361.1
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.4	2285.8	2291.5
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.5	2262.7
175°	2232.9	2230.5	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.9	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)