

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: P519559

Luminaire Tested: **SQ4-WB-150U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519559
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-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

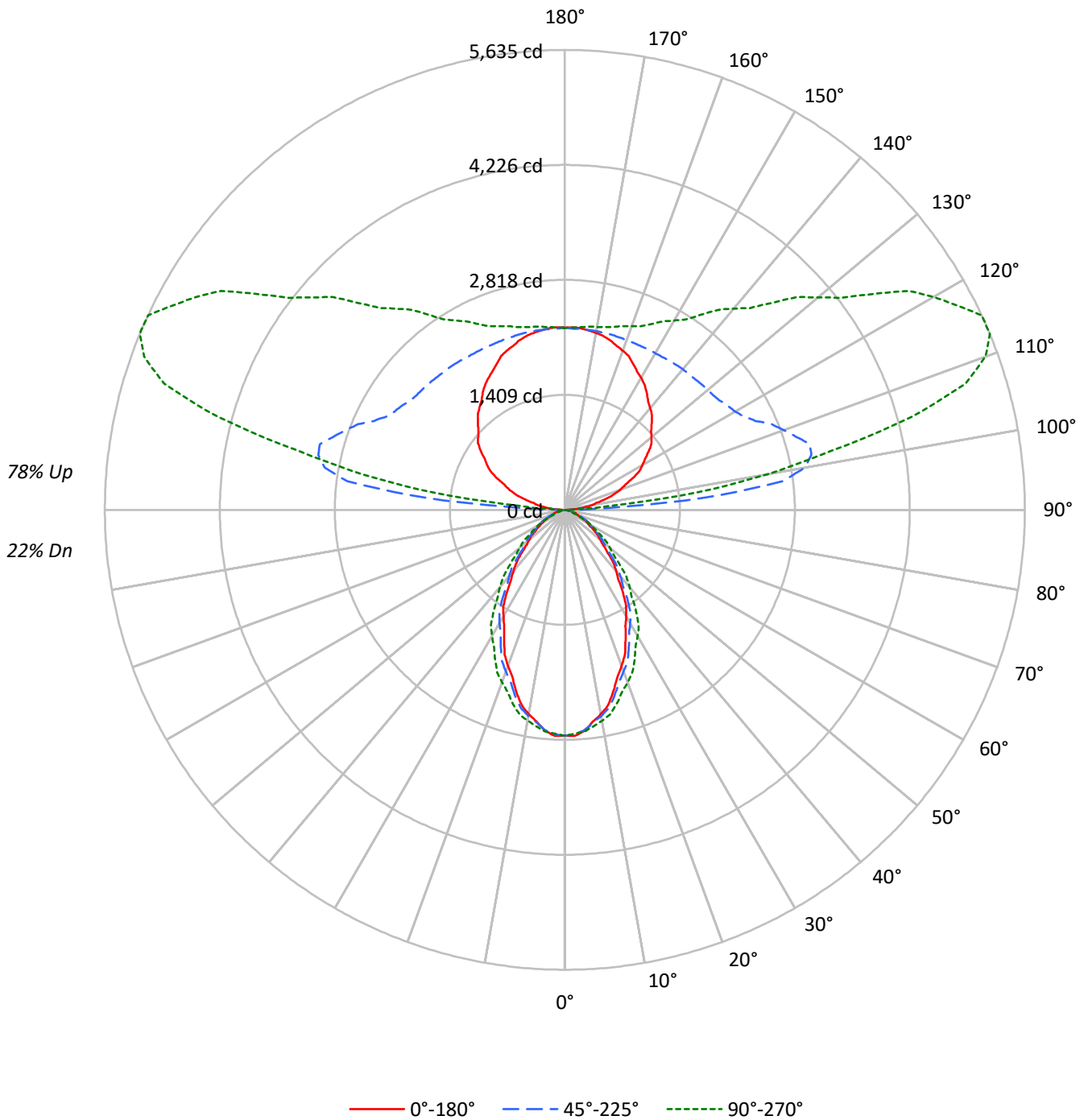
Lumens per Lamp: N/A
Luminaire Lumens: 18415.8 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8506	8506	8506
5°	8400	8370	8419
10°	7936	8008	8194
15°	7326	7496	7833
20°	6653	6903	7360
25°	5968	6293	6857
30°	5336	5685	6336
35°	4666	5003	5718
40°	3927	4239	4950
45°	3241	3521	4133
50°	2706	2950	3443
55°	2297	2531	2844
60°	1963	2195	2269
65°	1563	1846	1466
70°	1386	1440	895
75°	1283	1168	548
80°	1183	1075	473
85°	1069	984	385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.7	1.4
10°-20°	659.9	3.6
20°-30°	854.7	4.6
30°-40°	837.0	4.5
40°-50°	640.7	3.5
50°-60°	426.9	2.3
60°-70°	233.0	1.3
70°-80°	97.1	0.5
80°-90°	32.1	0.2
90°-100°	1036.6	5.6
100°-110°	2802.7	15.2
110°-120°	2946.7	16.0
120°-130°	2393.5	13.0
130°-140°	1877.5	10.2
140°-150°	1441.0	7.8
150°-160°	1036.3	5.6
160°-170°	633.1	3.4
170°-180°	213.4	1.2
0°-30°	1768.3	9.6
0°-40°	2605.3	14.1
0°-60°	3672.9	19.9
0°-90°	4035.1	21.9
90°-120°	6786.0	36.8
90°-150°	12497.9	67.9
90°-180°	14381.0	78.1
0°-180°	18415.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2766	2766	2766	2766	2766	
5°	2721	2694	2711	2718	2727	253
15°	2301	2293	2354	2418	2460	643
25°	1759	1763	1854	1935	2021	809
35°	1243	1249	1333	1422	1523	773
45°	745	759	810	871	950	581
55°	428	446	472	490	530	388
65°	215	233	254	222	202	223
75°	108	108	98	68	46	115
85°	30	30	28	18	11	33
90°	5	14	31	34	31	12
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°	2765.9	2765.9	2765.9	2765.9	2765.9
2.5°	2772.7	2748.0	2754.3	2754.1	2746.5
5°	2721.0	2693.7	2711.3	2717.6	2727.1
7.5°	2620.0	2599.4	2631.4	2655.2	2674.4
10°	2541.4	2523.6	2564.4	2599.0	2623.9
12.5°	2450.1	2435.2	2485.8	2532.2	2564.7
15°	2301.1	2292.8	2354.5	2418.5	2460.1
17.5°	2141.6	2137.6	2208.4	2283.1	2336.3
20°	2032.9	2031.7	2109.3	2187.2	2248.9
22.5°	1923.1	1925.8	2007.4	2088.3	2158.6
25°	1758.6	1763.3	1854.5	1935.3	2020.7
27.5°	1606.4	1608.5	1702.7	1788.1	1879.2
30°	1502.5	1508.4	1600.8	1689.1	1784.1
32.5°	1398.6	1405.5	1495.9	1587.2	1684.1
35°	1242.8	1248.7	1332.6	1422.3	1523.1
37.5°	1082.1	1090.2	1164.6	1249.4	1348.6
40°	978.2	990.1	1055.9	1135.8	1233.1
42.5°	878.2	892.9	953.9	1029.7	1117.5
45°	745.2	759.4	809.5	870.8	950.3
47.5°	630.6	647.0	685.5	738.2	806.1
50°	565.6	581.0	616.5	655.6	719.7
52.5°	508.3	523.7	555.4	585.5	640.1
55°	428.4	446.2	472.1	490.0	530.4
57.5°	362.9	380.0	400.5	408.6	433.0
60°	319.2	338.2	356.8	355.9	368.9
62.5°	279.4	295.5	314.1	301.2	302.0
65°	214.8	232.6	253.7	221.6	201.5
67.5°	173.6	177.3	199.0	154.6	130.6
70°	154.1	154.1	160.2	119.7	99.5
72.5°	135.7	135.7	130.1	97.3	76.2
75°	108.0	108.0	98.3	67.5	46.1
77.5°	83.3	82.3	75.2	50.3	33.5
80°	66.8	66.8	60.7	39.8	26.7
82.5°	52.2	52.2	47.1	31.1	19.9
85°	30.3	30.3	27.9	18.0	10.9
87.5°	11.6	13.5	16.0	12.5	11.1
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)