

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: P519615

Luminaire Tested: **SQ4-WB-150U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519615
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

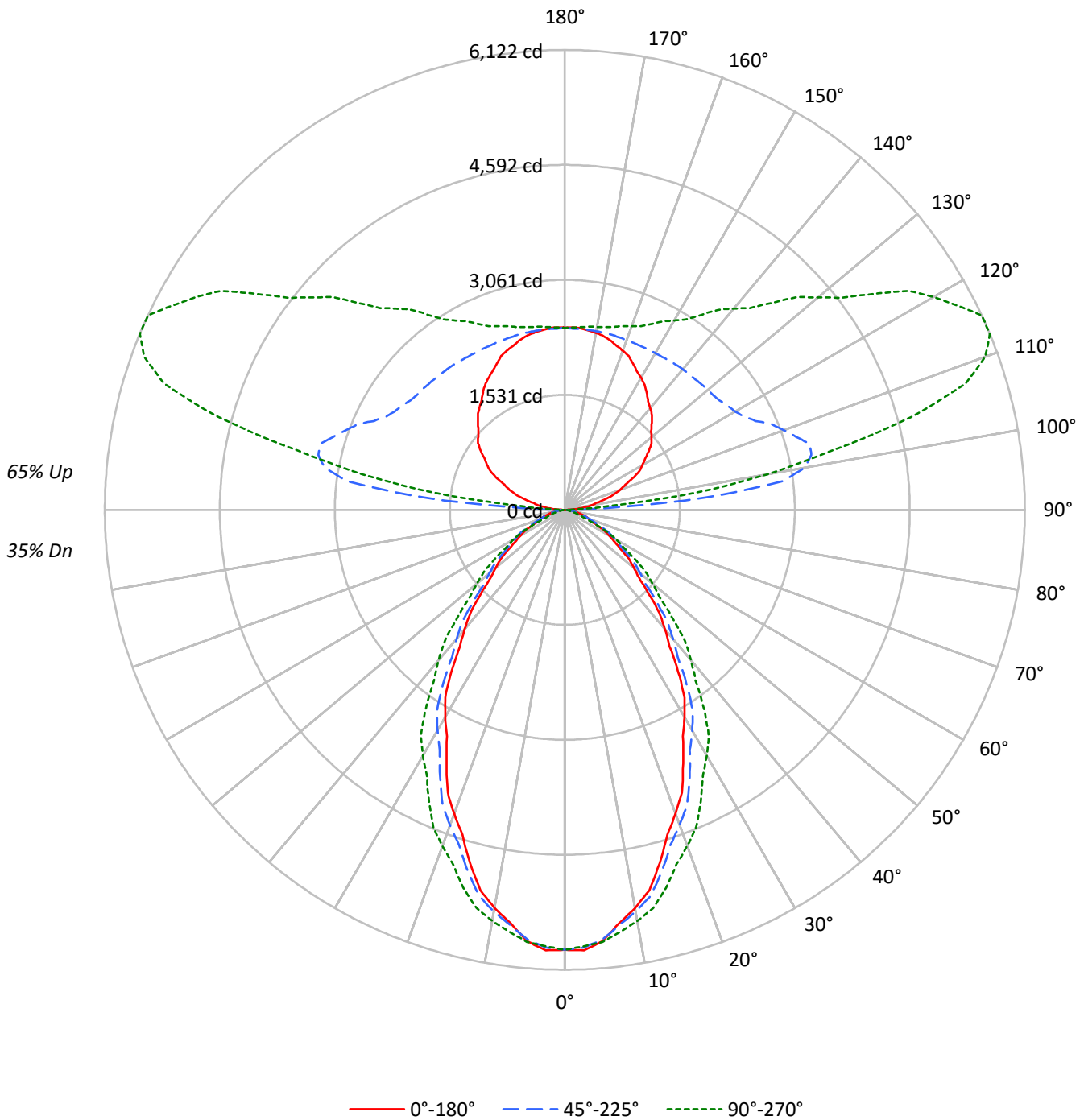
Lumens per Lamp: N/A
Luminaire Lumens: 24161.3 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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	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°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12635	13323	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5729	6246	7291
55°	4864	5360	6021
60°	4157	4647	4805
65°	3310	3908	3104
70°	2934	3050	1895
75°	2718	2473	1160
80°	2502	2276	1001
85°	2265	2085	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	537.1	2.2
10°-20°	1397.1	5.8
20°-30°	1809.7	7.5
30°-40°	1772.1	7.3
40°-50°	1356.5	5.6
50°-60°	903.9	3.7
60°-70°	493.2	2.0
70°-80°	205.5	0.9
80°-90°	63.2	0.3
90°-100°	1126.1	4.7
100°-110°	3044.8	12.6
110°-120°	3201.2	13.2
120°-130°	2600.2	10.8
130°-140°	2039.6	8.4
140°-150°	1565.4	6.5
150°-160°	1125.8	4.7
160°-170°	687.8	2.8
170°-180°	231.9	1.0
0°-30°	3744.0	15.5
0°-40°	5516.1	22.8
0°-60°	7776.5	32.2
0°-90°	8538.5	35.3
90°-120°	7372.0	30.5
90°-150°	13577.3	56.2
90°-180°	15623.0	64.7
0°-180°	24161.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5856	5856	5856	5856	5856	
5°	5761	5703	5740	5754	5774	536
15°	4872	4854	4985	5121	5209	1361
25°	3723	3733	3926	4098	4278	1712
35°	2631	2644	2821	3011	3225	1636
45°	1578	1608	1714	1844	2012	1230
55°	907	945	1000	1038	1123	822
65°	455	492	537	469	427	473
75°	229	229	208	143	98	244
85°	64	64	59	38	23	70
90°	5	15	34	36	34	15
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5856.1	5856.1	5856.1	5856.1	5856.1
2.5°	5870.5	5818.2	5831.4	5831.1	5815.0
5°	5761.0	5703.3	5740.5	5753.8	5773.9
7.5°	5547.3	5503.5	5571.4	5621.7	5662.4
10°	5380.7	5343.1	5429.6	5502.7	5555.5
12.5°	5187.5	5155.9	5263.1	5361.2	5430.1
15°	4872.0	4854.4	4985.0	5120.6	5208.6
17.5°	4534.3	4525.8	4675.6	4833.9	4946.5
20°	4304.1	4301.6	4466.0	4630.8	4761.5
22.5°	4071.8	4077.3	4250.1	4421.6	4570.3
25°	3723.4	3733.4	3926.3	4097.5	4278.4
27.5°	3401.1	3405.6	3605.1	3785.8	3978.8
30°	3181.2	3193.7	3389.3	3576.3	3777.3
32.5°	2961.2	2975.8	3167.3	3360.6	3565.6
35°	2631.3	2643.8	2821.4	3011.3	3224.8
37.5°	2291.1	2308.1	2465.8	2645.3	2855.3
40°	2071.1	2096.2	2235.6	2404.7	2610.7
42.5°	1859.4	1890.5	2019.7	2180.2	2366.1
45°	1577.7	1607.9	1713.9	1843.7	2012.0
47.5°	1335.2	1369.8	1451.3	1563.0	1706.7
50°	1197.4	1230.1	1305.4	1388.1	1523.8
52.5°	1076.1	1108.8	1175.8	1239.6	1355.2
55°	907.1	944.8	999.6	1037.5	1122.9
57.5°	768.3	804.5	848.0	865.1	916.8
60°	675.8	716.0	755.5	753.5	781.2
62.5°	591.5	625.7	665.0	637.8	639.3
65°	454.8	492.5	537.0	469.3	426.6
67.5°	367.5	375.5	421.4	327.2	276.5
70°	326.3	326.3	339.2	253.4	210.7
72.5°	287.3	287.3	275.5	206.1	161.4
75°	228.7	228.7	208.1	142.9	97.6
77.5°	176.3	174.3	159.3	106.6	70.9
80°	141.3	141.3	128.5	84.2	56.5
82.5°	110.5	110.5	99.7	65.8	42.1
85°	64.2	64.2	59.1	38.2	23.1
87.5°	23.7	25.7	27.3	19.6	17.1
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)