

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: P519606

Luminaire Tested: **SQ4-WB-150U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519606
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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

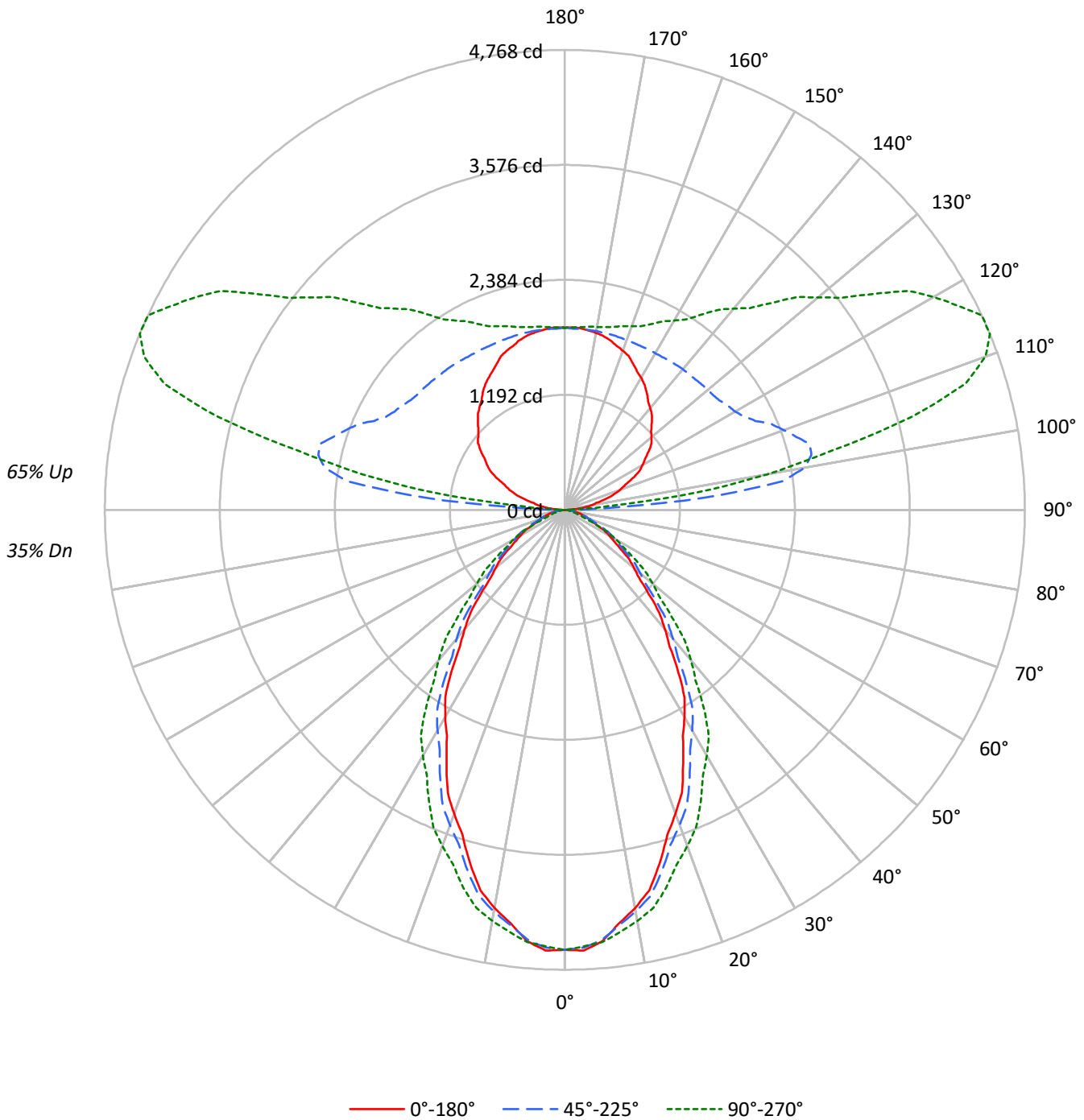
Lumens per Lamp: N/A
Luminaire Lumens: 18820.1 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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	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°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20271
15°	18124	18545	19376
20°	16458	17077	18208
25°	14763	15567	16963
30°	13199	14063	15673
35°	11542	12376	14146
40°	9715	10487	12246
45°	8018	8709	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5430	5614
65°	3867	4566	3627
70°	3429	3563	2213
75°	3174	2889	1356
80°	2925	2659	1169
85°	2646	2435	953



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	418.4	2.2
10°-20°	1088.3	5.8
20°-30°	1409.6	7.5
30°-40°	1380.4	7.3
40°-50°	1056.6	5.6
50°-60°	704.1	3.7
60°-70°	384.2	2.0
70°-80°	160.1	0.9
80°-90°	49.3	0.3
90°-100°	877.2	4.7
100°-110°	2371.7	12.6
110°-120°	2493.5	13.2
120°-130°	2025.4	10.8
130°-140°	1588.7	8.4
140°-150°	1219.4	6.5
150°-160°	877.0	4.7
160°-170°	535.7	2.8
170°-180°	180.6	1.0
0°-30°	2916.3	15.5
0°-40°	4296.7	22.8
0°-60°	6057.4	32.2
0°-90°	6650.9	35.3
90°-120°	5742.4	30.5
90°-150°	10575.8	56.2
90°-180°	12169.0	64.7
0°-180°	18820.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4562	4562	4562	4562	4562	
5°	4488	4442	4472	4482	4498	417
15°	3795	3781	3883	3989	4057	1060
25°	2900	2908	3058	3192	3333	1334
35°	2050	2059	2198	2346	2512	1274
45°	1229	1252	1335	1436	1567	958
55°	706	736	779	808	875	641
65°	354	384	418	366	332	368
75°	178	178	162	111	76	190
85°	50	50	46	30	18	54
90°	4	12	26	28	26	12
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1888	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1890	1888	1881	1906	1902	179
180°	1888	1888	1888	1888	1888	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4561.5	4561.5	4561.5	4561.5	4561.5
2.5°	4572.7	4532.0	4542.3	4542.0	4529.5
5°	4487.5	4442.5	4471.5	4481.8	4497.5
7.5°	4321.0	4286.9	4339.8	4378.9	4410.6
10°	4191.3	4161.9	4229.3	4286.3	4327.4
12.5°	4040.7	4016.1	4099.6	4176.1	4229.7
15°	3794.9	3781.2	3883.0	3988.7	4057.1
17.5°	3531.9	3525.3	3642.0	3765.3	3853.0
20°	3352.6	3350.6	3478.7	3607.1	3708.9
22.5°	3171.7	3176.0	3310.6	3444.1	3560.0
25°	2900.3	2908.1	3058.4	3191.7	3332.6
27.5°	2649.3	2652.8	2808.2	2948.9	3099.2
30°	2477.9	2487.7	2640.0	2785.7	2942.3
32.5°	2306.6	2317.9	2467.1	2617.7	2777.4
35°	2049.6	2059.4	2197.7	2345.6	2511.9
37.5°	1784.6	1797.9	1920.7	2060.5	2224.1
40°	1613.3	1632.8	1741.4	1873.1	2033.6
42.5°	1448.3	1472.6	1573.2	1698.2	1843.0
45°	1229.0	1252.4	1335.0	1436.1	1567.2
47.5°	1040.0	1067.0	1130.5	1217.5	1329.4
50°	932.7	958.2	1016.8	1081.2	1186.9
52.5°	838.3	863.7	915.9	965.6	1055.6
55°	706.5	735.9	778.6	808.1	874.7
57.5°	598.5	626.6	660.5	673.8	714.2
60°	526.4	557.7	588.5	586.9	608.5
62.5°	460.8	487.4	518.0	496.8	498.0
65°	354.3	383.6	418.3	365.5	332.3
67.5°	286.2	292.5	328.3	254.9	215.4
70°	254.2	254.2	264.2	197.4	164.1
72.5°	223.8	223.8	214.6	160.5	125.7
75°	178.1	178.1	162.1	111.3	76.1
77.5°	137.3	135.7	124.1	83.0	55.2
80°	110.1	110.1	100.1	65.6	44.0
82.5°	86.1	86.1	77.7	51.2	32.8
85°	50.0	50.0	46.0	29.8	18.0
87.5°	18.4	20.0	21.3	15.3	13.3
90°	4.1	12.0	26.4	28.4	26.4
92.5°	57.7	210.3	414.9	180.1	130.4
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1382.0
100°	280.4	576.4	2527.4	2635.8	2131.3
102.5°	337.3	615.8	2616.8	3207.6	2830.2
105°	440.9	681.3	2631.1	3881.0	3722.1
107.5°	536.8	756.1	2516.1	4301.1	4354.0
110°	611.5	810.2	2413.7	4413.9	4638.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	678.2	864.1	2319.4	4391.4	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.1	2091.4	3968.5	4585.6
120°	930.5	1089.4	2037.8	3785.2	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.8	3898.8
127.5°	1133.3	1285.5	1943.9	3098.6	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.4
132.5°	1212.9	1368.3	1924.4	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.3
137.5°	1335.2	1477.9	1904.9	2549.8	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.2
145°	1481.1	1592.4	1887.5	2293.7	2468.5
147.5°	1538.4	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.1	2265.4
152.5°	1619.7	1696.0	1873.6	2113.8	2202.0
155°	1672.1	1737.7	1871.2	2057.6	2125.2
157.5°	1726.5	1772.2	1871.6	2018.5	2063.0
160°	1757.4	1795.2	1873.2	1993.8	2025.6
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.6
167.5°	1846.8	1859.1	1879.7	1934.3	1939.1
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.5	1887.5	1881.4	1905.7	1901.7
177.5°	1894.0	1889.2	1881.0	1897.1	1892.3
180°	1887.5	1887.5	1887.5	1887.5	1887.5

(END OF REPORT)