

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: P563812

Luminaire Tested: **SQ4-PP3-150U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563812
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

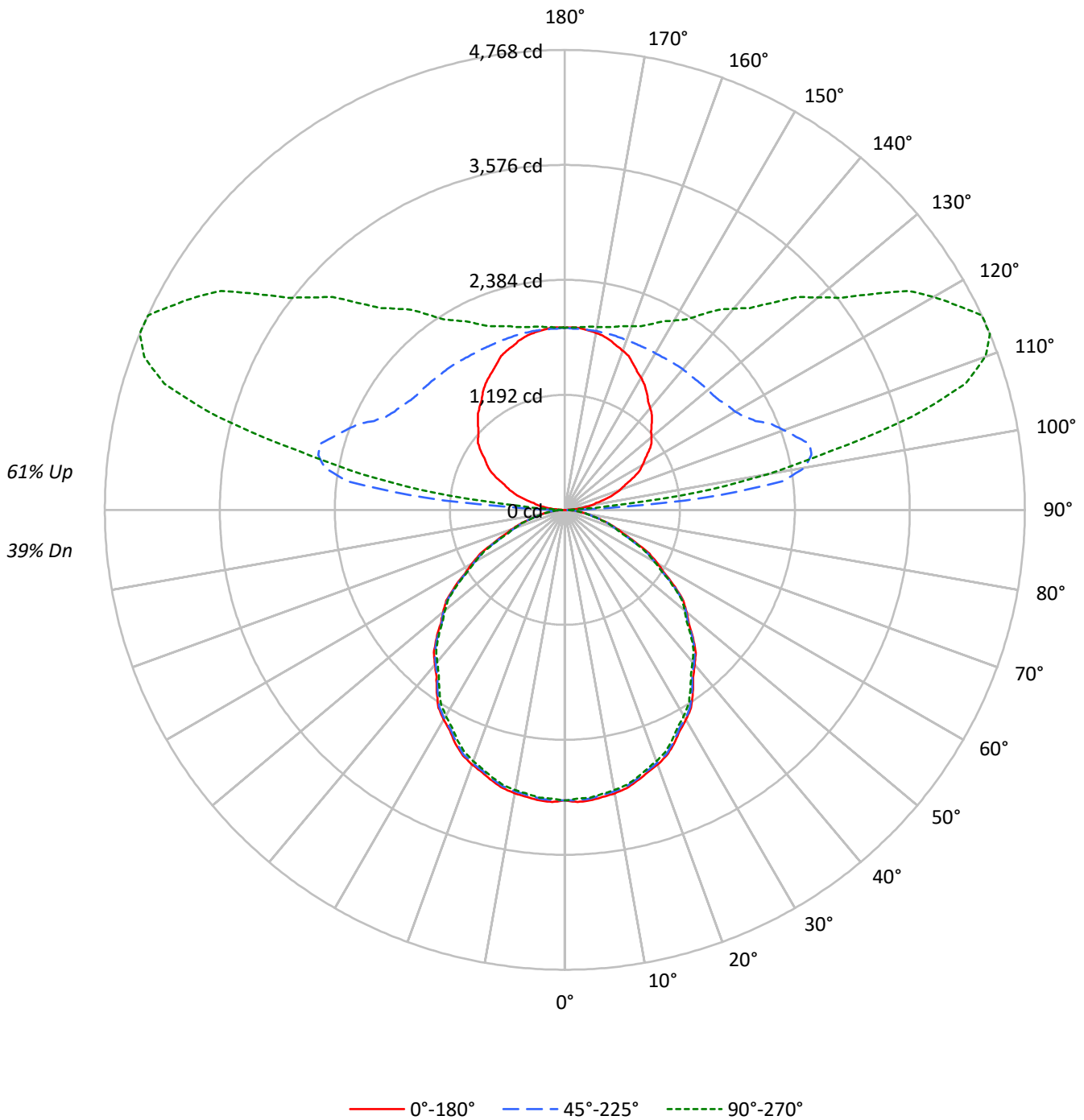
Lumens per Lamp: N/A
Luminaire Lumens: 19884.9 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	63	60	56	53	47	45	43	36	34	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	73	62	54	49	66	57	50	45	47	42	38	37	34	31	29	26	24	20
5	67	55	47	42	60	51	44	39	42	37	33	33	30	27	26	23	21	18
6	61	50	42	36	56	45	38	33	38	32	28	30	26	24	23	21	19	16
7	57	45	37	31	51	41	34	29	34	29	25	27	24	21	21	19	17	14
8	52	40	33	28	48	37	30	26	31	26	22	25	21	18	20	17	15	12
9	49	37	30	25	44	34	27	23	28	23	20	23	19	17	18	15	13	11
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13900	13900	13900
5°	14001	13916	13867
10°	13978	13879	13817
15°	13886	13810	13734
20°	13793	13716	13612
25°	13629	13535	13401
30°	13377	13307	13138
35°	13027	12938	12775
40°	12611	12531	12388
45°	12266	12180	12059
50°	11826	11750	11636
55°	11214	11065	10981
60°	10209	9916	9867
65°	8993	8619	8589
70°	7765	7444	7444
75°	6684	6589	6495
80°	5892	5964	5823
85°	4610	5034	5034



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.9	1.4
10°-20°	813.5	4.1
20°-30°	1218.6	6.1
30°-40°	1429.3	7.2
40°-50°	1433.8	7.2
50°-60°	1223.1	6.2
60°-70°	797.7	4.0
70°-80°	400.2	2.0
80°-90°	114.7	0.6
90°-100°	877.2	4.4
100°-110°	2371.7	11.9
110°-120°	2493.5	12.5
120°-130°	2025.4	10.2
130°-140°	1588.7	8.0
140°-150°	1219.4	6.1
150°-160°	877.0	4.4
160°-170°	535.7	2.7
170°-180°	180.6	0.9
0°-30°	2317.0	11.7
0°-40°	3746.3	18.8
0°-60°	6403.2	32.2
0°-90°	7715.8	38.8
90°-120°	5742.4	28.9
90°-150°	10575.8	53.2
90°-180°	12169.0	61.2
0°-180°	19884.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3013	3013	3013	3013	3013	
5°	3024	2995	3005	2995	2995	287
15°	2908	2879	2892	2881	2876	820
25°	2678	2647	2659	2635	2633	1231
35°	2313	2290	2297	2271	2268	1445
45°	1880	1867	1867	1848	1848	1448
55°	1394	1389	1376	1368	1365	1239
65°	824	808	790	784	787	822
75°	375	375	370	367	364	407
85°	87	95	95	95	95	102
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°	3013.1	3013.1	3013.1	3013.1	3013.1
2.5°	3032.1	3007.3	3013.1	3008.6	2996.2
5°	3023.6	2995.2	3005.2	2994.6	2994.6
7.5°	3003.1	2972.1	2981.9	2971.3	2970.8
10°	2984.0	2953.1	2962.9	2952.3	2949.7
12.5°	2956.6	2925.6	2937.6	2924.9	2924.4
15°	2907.5	2879.1	2891.6	2880.9	2875.8
17.5°	2852.0	2821.0	2836.2	2821.3	2819.3
20°	2809.7	2778.8	2793.9	2772.8	2772.8
22.5°	2759.0	2728.1	2745.3	2717.9	2717.9
25°	2677.7	2646.7	2659.2	2635.4	2632.8
27.5°	2581.1	2550.6	2563.6	2536.7	2536.2
30°	2511.3	2482.9	2498.1	2469.0	2466.5
32.5°	2435.3	2409.0	2420.0	2390.9	2388.3
35°	2313.3	2290.1	2297.4	2271.0	2268.4
37.5°	2184.9	2161.2	2169.6	2146.9	2145.9
40°	2094.1	2078.6	2080.9	2062.3	2057.1
42.5°	2009.6	1992.0	1994.3	1975.8	1974.7
45°	1880.2	1867.3	1867.0	1848.5	1848.5
47.5°	1742.9	1733.1	1730.2	1714.9	1714.4
50°	1647.8	1640.1	1637.3	1624.0	1621.4
52.5°	1548.5	1544.9	1535.9	1524.8	1524.2
55°	1394.3	1389.1	1375.8	1367.8	1365.3
57.5°	1226.9	1216.6	1201.5	1190.0	1192.0
60°	1106.5	1096.1	1074.8	1069.5	1069.5
62.5°	990.3	977.9	956.5	949.2	953.3
65°	823.9	808.4	789.6	784.4	786.9
67.5°	672.9	658.9	638.5	638.5	636.4
70°	575.7	567.9	551.9	551.9	551.9
72.5°	489.1	485.5	473.7	473.7	471.6
75°	375.0	375.0	369.7	367.0	364.4
77.5°	281.0	282.0	279.4	276.6	272.0
80°	221.8	227.0	224.5	221.8	219.2
82.5°	166.9	172.1	171.6	166.9	166.4
85°	87.1	94.9	95.1	95.1	95.1
87.5°	24.1	33.9	39.1	39.5	41.2
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)