

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: P565156

Luminaire Tested: **SQ4-PW1-150U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565156
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

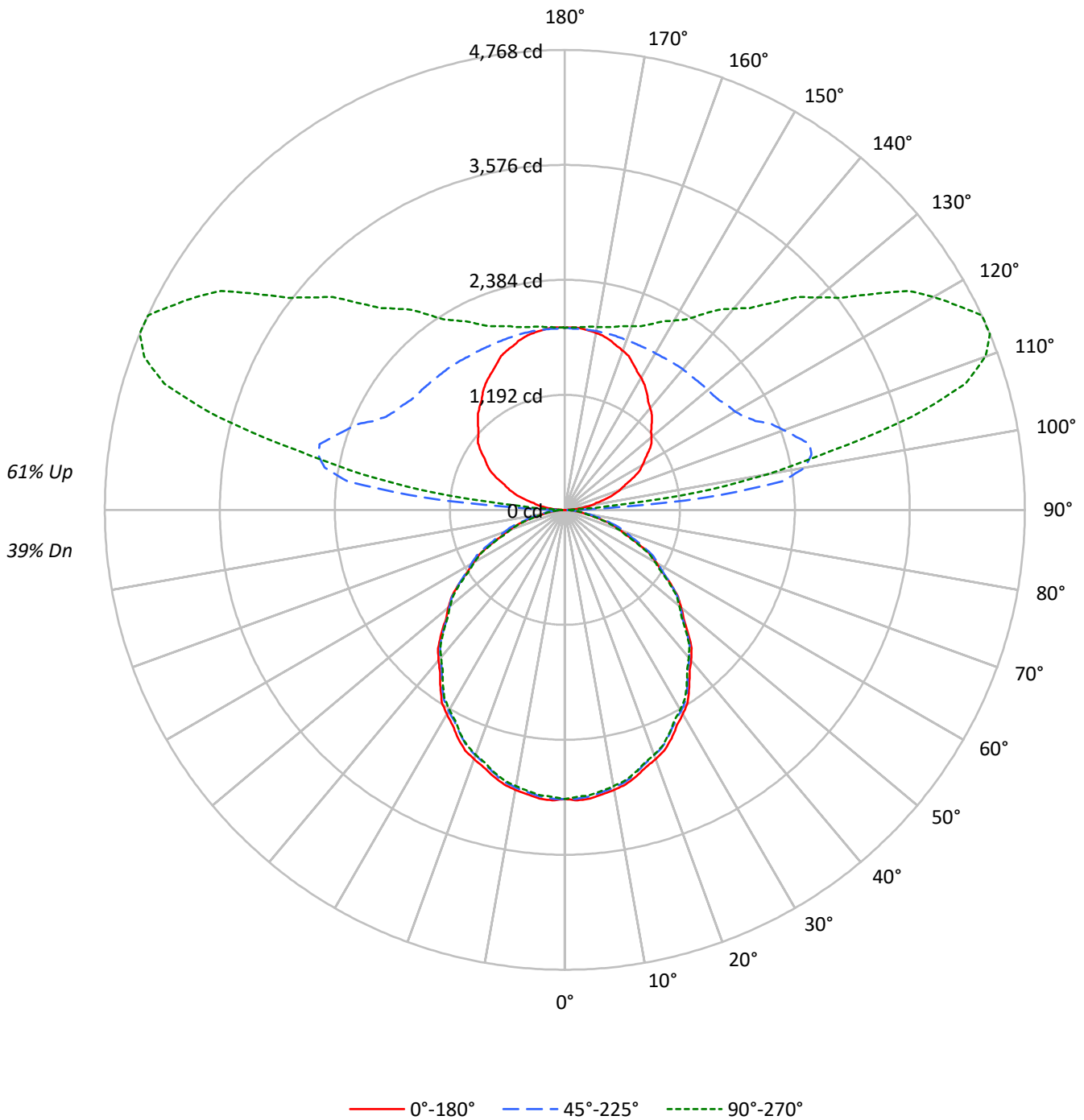
Lumens per Lamp: N/A
Luminaire Lumens: 19800.7 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13809	13748
10°	13808	13697	13622
15°	13662	13510	13460
20°	13499	13291	13265
25°	13310	13068	13028
30°	13029	12832	12747
35°	12659	12480	12406
40°	12264	12073	12025
45°	11787	11631	11580
50°	11298	11203	11127
55°	10771	10771	10600
60°	10114	10308	9943
65°	9255	9716	9024
70°	8159	8942	7944
75°	6967	8003	6780
80°	5403	6737	5473
85°	3493	5171	4615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.3	1.4
10°-20°	797.0	4.0
20°-30°	1182.2	6.0
30°-40°	1383.3	7.0
40°-50°	1377.2	7.0
50°-60°	1189.2	6.0
60°-70°	856.0	4.3
70°-80°	448.9	2.3
80°-90°	115.2	0.6
90°-100°	877.2	4.4
100°-110°	2371.7	12.0
110°-120°	2493.5	12.6
120°-130°	2025.4	10.2
130°-140°	1588.7	8.0
140°-150°	1219.4	6.2
150°-160°	877.0	4.4
160°-170°	535.7	2.7
170°-180°	180.6	0.9
0°-30°	2261.6	11.4
0°-40°	3644.9	18.4
0°-60°	6211.3	31.4
0°-90°	7631.5	38.5
90°-120°	5742.4	29.0
90°-150°	10575.8	53.4
90°-180°	12169.0	61.5
0°-180°	19800.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2998	2998	2998	2998	2998	
5°	3006	2972	2982	2974	2969	285
15°	2861	2824	2829	2824	2818	806
25°	2615	2571	2567	2552	2560	1202
35°	2248	2217	2216	2195	2203	1405
45°	1807	1791	1783	1778	1775	1394
55°	1339	1337	1339	1321	1318	1195
65°	848	874	890	855	827	840
75°	391	427	449	419	380	419
85°	66	87	98	92	87	87
90°	4	12	26	28	26	11
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°	2998.0	2998.0	2998.0	2998.0	2998.0
2.5°	3014.9	2990.1	2998.0	2991.3	2976.8
5°	3005.9	2972.3	2982.1	2974.1	2968.9
7.5°	2975.2	2944.2	2951.5	2942.9	2939.8
10°	2947.8	2916.8	2924.0	2913.3	2908.1
12.5°	2916.1	2883.0	2890.2	2879.5	2876.5
15°	2860.6	2824.4	2828.9	2823.5	2818.3
17.5°	2796.2	2759.5	2760.2	2751.8	2750.7
20°	2749.7	2710.9	2707.4	2697.0	2702.1
22.5°	2699.0	2658.1	2654.6	2639.9	2647.2
25°	2615.0	2571.0	2567.4	2551.7	2559.5
27.5°	2517.8	2474.4	2474.4	2452.4	2460.7
30°	2445.9	2404.6	2408.9	2382.7	2393.1
32.5°	2369.8	2332.6	2335.0	2308.8	2319.1
35°	2247.8	2216.8	2216.1	2195.2	2202.9
37.5°	2123.1	2095.8	2091.4	2079.3	2081.4
40°	2036.5	2013.3	2004.8	1996.9	1996.9
42.5°	1945.6	1924.5	1916.0	1910.2	1908.1
45°	1806.7	1791.2	1782.9	1777.6	1775.0
47.5°	1669.3	1654.9	1647.7	1643.9	1641.3
50°	1574.3	1563.9	1561.0	1553.1	1550.5
52.5°	1479.2	1473.0	1470.2	1460.1	1457.5
55°	1339.2	1336.6	1339.2	1320.6	1318.0
57.5°	1193.4	1197.5	1206.0	1181.1	1174.9
60°	1096.2	1106.5	1117.3	1088.0	1077.7
62.5°	996.9	1013.4	1028.5	994.9	980.5
65°	847.9	873.7	890.1	855.2	826.7
67.5°	704.2	736.2	756.0	718.3	686.2
70°	604.9	641.0	663.0	625.2	589.0
72.5°	518.2	558.5	576.3	540.7	504.5
75°	390.9	427.1	449.0	419.1	380.4
77.5°	277.3	311.4	329.6	303.6	271.5
80°	203.4	239.5	253.6	231.9	206.0
82.5°	144.2	174.2	183.8	170.8	153.2
85°	66.0	86.7	97.7	92.3	87.2
87.5°	17.7	33.8	45.4	45.9	47.5
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)