

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: P564484

Luminaire Tested: **SQ4-PR1-150U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564484
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

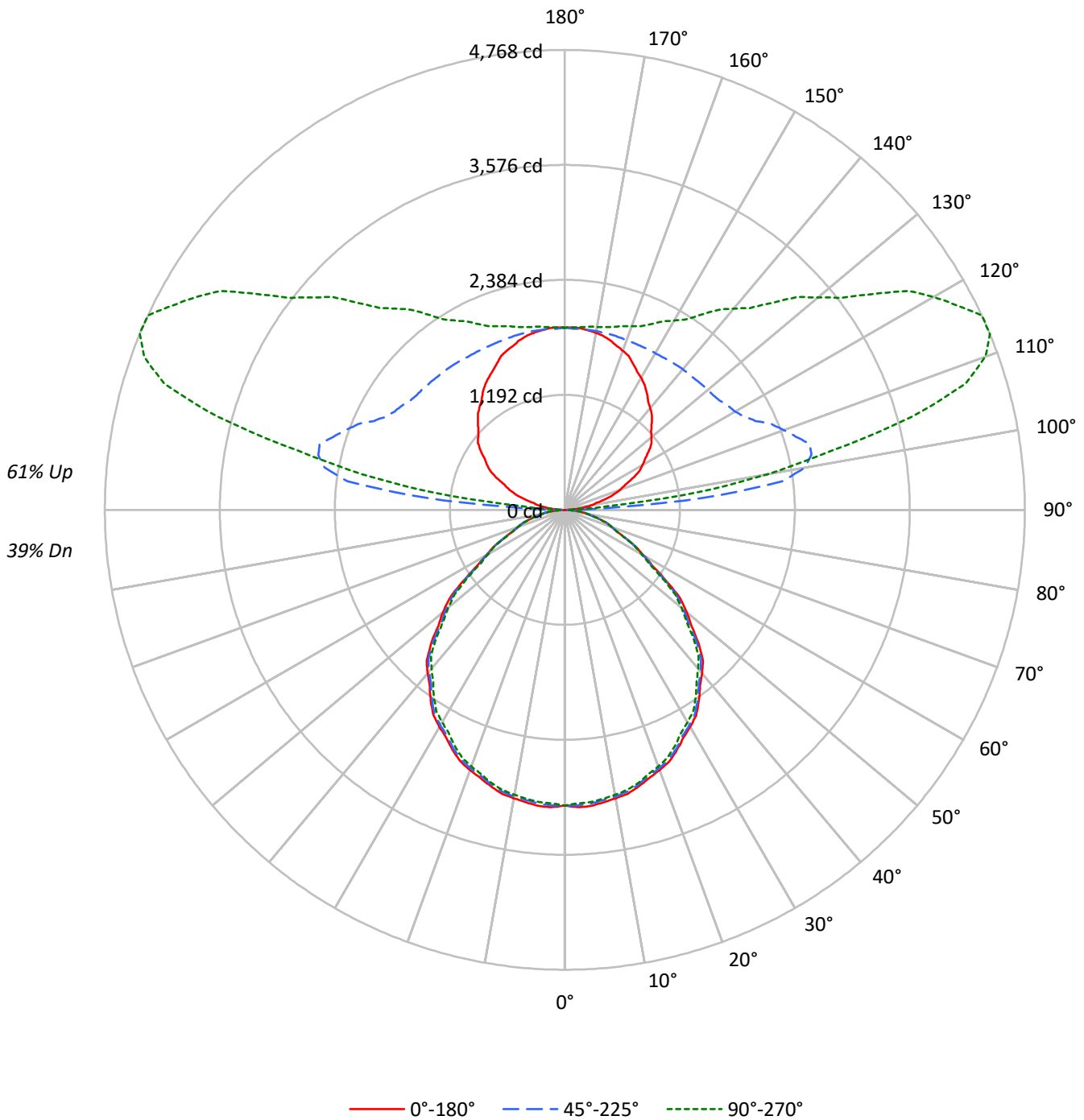
Lumens per Lamp: N/A
Luminaire Lumens: 19839.3 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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



TEST NUMBER: P564484
CATALOG NUMBER: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P564484

CATALOG NUMBER: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-8

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	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28
3	80	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11
10	46	34	27	22	42	31	25	21	26	21	18	21	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14090
10°	14229	14130	14056
15°	14166	14078	14002
20°	14095	14004	13900
25°	13996	13902	13740
30°	13845	13746	13549
35°	13640	13521	13328
40°	13330	13186	12948
45°	12786	12562	12303
50°	11829	11544	11317
55°	10324	10090	9878
60°	8700	8626	8457
65°	7525	7554	7497
70°	6911	6948	6948
75°	6638	6638	6686
80°	6246	6315	6246
85°	5034	5595	5595



TEST NUMBER: P564484

CATALOG NUMBER: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.0	1.5
10°-20°	829.7	4.2
20°-30°	1251.5	6.3
30°-40°	1491.1	7.5
40°-50°	1470.1	7.4
50°-60°	1123.5	5.7
60°-70°	695.3	3.5
70°-80°	394.9	2.0
80°-90°	124.1	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	6.1
150°-160°	877.0	4.4
160°-170°	535.7	2.7
170°-180°	180.6	0.9
0°-30°	2371.2	12.0
0°-40°	3862.3	19.5
0°-60°	6455.9	32.5
0°-90°	7670.2	38.7
90°-120°	5742.4	28.9
90°-150°	10575.8	53.3
90°-180°	12169.0	61.3
0°-180°	19839.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3067	3067	3067	3067	3067	
5°	3082	3049	3059	3048	3043	292
15°	2966	2935	2948	2937	2932	837
25°	2750	2716	2731	2702	2700	1265
35°	2422	2394	2401	2369	2367	1512
45°	1960	1934	1926	1891	1886	1501
55°	1284	1263	1255	1233	1228	1150
65°	689	684	692	687	687	698
75°	372	372	372	375	375	393
85°	95	100	106	106	106	111
90°	4	12	26	28	26	13
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	

TEST NUMBER: P564484

CATALOG NUMBER: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3066.6	3066.6	3066.6	3066.6	3066.6
2.5°	3085.6	3058.8	3066.6	3060.0	3045.5
5°	3082.5	3048.9	3058.7	3048.0	3042.8
7.5°	3058.7	3025.6	3035.5	3024.8	3021.7
10°	3037.6	3006.6	3016.4	3005.8	3000.6
12.5°	3014.3	2981.3	2993.2	2980.4	2975.2
15°	2966.2	2935.3	2947.8	2937.1	2931.9
17.5°	2913.4	2880.4	2892.8	2880.5	2873.8
20°	2871.2	2840.2	2852.7	2834.1	2831.5
22.5°	2824.7	2793.7	2806.2	2781.3	2780.8
25°	2749.7	2716.1	2731.2	2702.1	2699.5
27.5°	2660.4	2629.4	2641.9	2612.2	2609.1
30°	2599.1	2568.1	2580.6	2548.8	2543.6
32.5°	2529.4	2500.4	2510.9	2479.1	2476.0
35°	2422.1	2393.7	2401.0	2369.2	2366.7
37.5°	2300.1	2274.3	2278.4	2243.5	2240.9
40°	2213.5	2187.6	2189.7	2152.7	2150.1
42.5°	2118.4	2092.5	2090.4	2053.3	2050.8
45°	1959.9	1934.1	1925.6	1891.1	1885.9
47.5°	1779.2	1753.4	1737.5	1709.4	1705.8
50°	1648.2	1622.4	1608.6	1584.6	1576.9
52.5°	1506.6	1480.8	1469.1	1447.3	1439.5
55°	1283.7	1263.0	1254.6	1233.4	1228.2
57.5°	1071.9	1057.9	1055.5	1034.8	1032.8
60°	943.0	935.2	935.0	916.6	916.6
62.5°	833.1	827.4	831.5	819.3	817.2
65°	689.4	684.2	692.0	686.8	686.8
67.5°	575.8	575.8	580.6	578.5	578.5
70°	512.4	512.4	515.1	515.1	515.1
72.5°	455.4	453.3	460.1	460.1	458.0
75°	372.4	372.4	372.4	375.1	375.1
77.5°	290.0	290.5	292.7	292.1	290.0
80°	235.1	237.7	237.7	235.1	235.1
82.5°	180.1	182.7	182.8	182.2	180.1
85°	95.1	100.3	105.7	105.7	105.7
87.5°	28.3	38.1	47.5	47.9	45.4
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



TEST NUMBER: P564484

CATALOG NUMBER: SQ4-PR1-150U-100D-840-1D-UNV-STD-W-8

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)