

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: P520407

Luminaire Tested: **SQ4-F-150U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520407
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

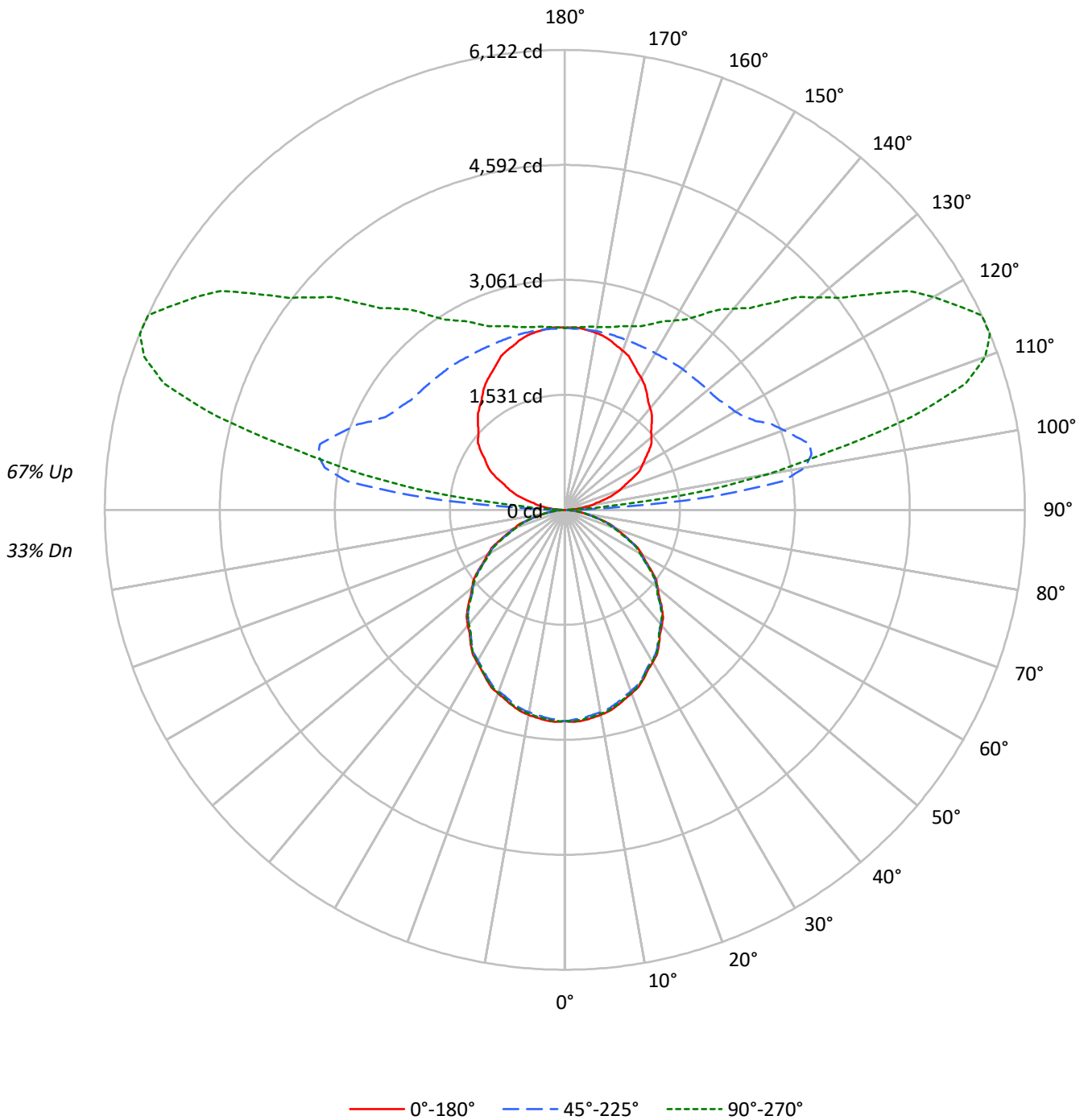
Lumens per Lamp: N/A
Luminaire Lumens: 23312.4 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 200.7
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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8544	8607
15°	8589	8483	8556
20°	8511	8411	8477
25°	8417	8331	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7971
45°	7925	7826	7848
50°	7705	7644	7644
55°	7526	7430	7362
60°	7284	7158	7095
65°	6891	6760	6667
70°	6471	6310	6150
75°	5822	5611	5488
80°	4654	4564	4520
85°	2791	3155	3243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.7	1.1
10°-20°	756.4	3.2
20°-30°	1136.5	4.9
30°-40°	1356.0	5.8
40°-50°	1390.7	6.0
50°-60°	1239.2	5.3
60°-70°	923.9	4.0
70°-80°	501.1	2.1
80°-90°	120.1	0.5
90°-100°	1126.1	4.8
100°-110°	3044.8	13.1
110°-120°	3201.1	13.7
120°-130°	2600.2	11.2
130°-140°	2039.6	8.7
140°-150°	1565.4	6.7
150°-160°	1125.8	4.8
160°-170°	687.8	3.0
170°-180°	231.9	1.0
0°-30°	2158.6	9.3
0°-40°	3514.6	15.1
0°-60°	6144.5	26.4
0°-90°	7689.7	33.0
90°-120°	7372.0	31.6
90°-150°	13577.3	58.2
90°-180°	15623.0	67.0
0°-180°	23312.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2815	2815	2815	2815	2815	
5°	2815	2810	2779	2802	2800	267
15°	2698	2693	2664	2685	2687	761
25°	2481	2478	2455	2468	2473	1143
35°	2185	2180	2162	2162	2172	1365
45°	1822	1815	1799	1799	1804	1402
55°	1404	1401	1386	1373	1373	1254
65°	947	947	929	919	916	943
75°	490	480	472	464	462	515
85°	79	84	89	89	92	110
90°	5	15	34	36	34	14
95°	175	614	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°	1901	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°	2815.0	2815.0	2815.0	2815.0	2815.0
2.5°	2825.1	2819.2	2794.5	2814.9	2812.9
5°	2815.0	2810.0	2779.3	2802.1	2799.7
7.5°	2792.0	2786.6	2756.3	2779.3	2778.7
10°	2771.6	2764.1	2735.9	2758.8	2756.3
12.5°	2745.0	2737.6	2709.3	2732.2	2729.7
15°	2697.6	2692.6	2664.4	2684.9	2687.4
17.5°	2643.5	2634.0	2608.7	2628.7	2631.2
20°	2600.6	2593.1	2570.0	2587.9	2590.3
22.5°	2555.7	2548.2	2525.1	2543.0	2545.5
25°	2480.6	2478.2	2455.1	2468.0	2472.9
27.5°	2399.5	2392.5	2373.9	2383.8	2388.8
30°	2340.3	2335.3	2314.8	2322.6	2327.5
32.5°	2279.0	2276.0	2257.6	2261.4	2268.4
35°	2184.6	2179.6	2161.6	2161.9	2171.8
37.5°	2080.0	2074.5	2059.5	2057.1	2061.1
40°	2008.5	2001.0	1988.1	1985.5	1985.5
42.5°	1935.1	1929.5	1912.5	1908.1	1914.1
45°	1822.2	1814.7	1799.3	1799.4	1804.4
47.5°	1700.3	1697.2	1679.3	1671.1	1673.2
50°	1610.4	1615.3	1597.6	1587.7	1597.6
52.5°	1532.8	1529.8	1513.9	1503.8	1507.8
55°	1403.7	1401.2	1385.8	1373.1	1373.1
57.5°	1274.0	1267.6	1251.5	1242.0	1249.6
60°	1184.2	1181.7	1163.8	1146.0	1153.5
62.5°	1094.4	1089.8	1071.8	1060.2	1065.7
65°	946.9	946.9	929.0	918.7	916.2
67.5°	817.7	805.7	795.7	783.4	780.0
70°	719.7	709.7	701.8	691.5	683.9
72.5°	623.7	617.8	605.9	595.7	594.2
75°	490.0	480.0	472.2	464.4	461.9
77.5°	348.7	346.6	339.4	335.4	336.8
80°	262.8	262.8	257.7	257.7	255.2
82.5°	185.3	187.3	186.3	182.2	181.8
85°	79.1	84.1	89.4	89.4	91.9
87.5°	15.4	27.3	29.1	29.6	29.1
90°	5.2	15.4	33.9	36.4	33.9
92.5°	74.0	269.9	532.6	231.2	167.5
95°	174.7	613.5	1872.7	969.2	576.4
97.5°	280.7	703.5	2919.3	2415.9	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	4982.4	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.7
110°	785.1	1040.1	3098.6	5666.6	5954.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.6	5637.6	6121.7
115°	996.3	1218.2	2801.4	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5886.9
120°	1194.6	1398.6	2616.2	4859.4	5667.8
122.5°	1265.5	1465.5	2574.4	4607.0	5421.7
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1455.0	1650.3	2495.7	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.1
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.3	2457.0	3440.3	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	2433.1	3069.3	3357.4
145°	1901.4	2044.3	2423.1	2944.6	3169.1
147.5°	1975.1	2101.5	2411.7	2831.9	3004.3
150°	2029.3	2141.4	2407.4	2770.6	2908.3
152.5°	2079.4	2177.3	2405.4	2713.6	2826.9
155°	2146.7	2230.8	2402.3	2641.6	2728.3
157.5°	2216.6	2275.2	2402.8	2591.3	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2406.9	2534.4	2565.1
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2370.9	2386.8	2413.3	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	2458.0
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)