

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: P520398

Luminaire Tested: **SQ4-F-150U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520398
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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

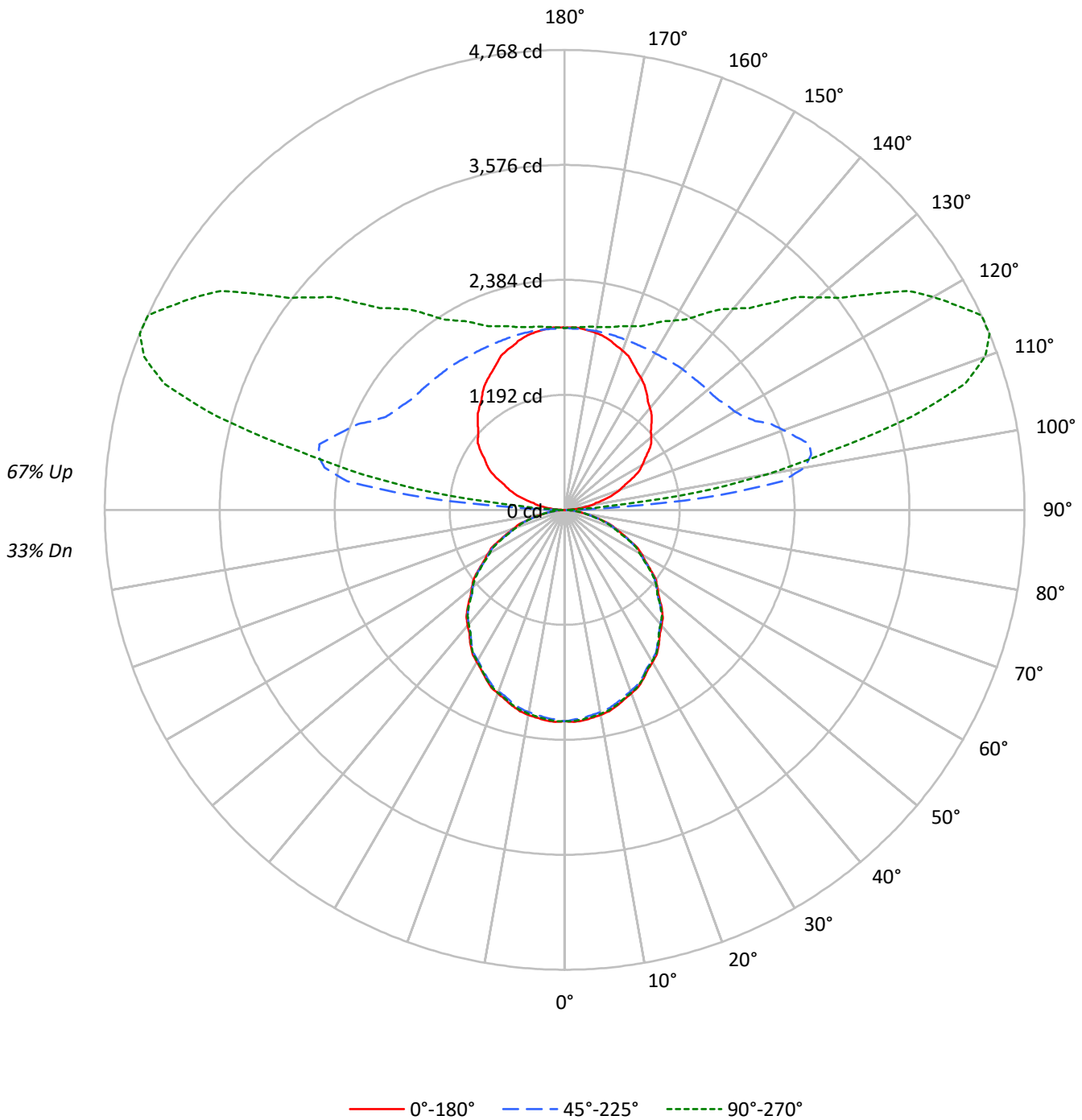
Lumens per Lamp: N/A
Luminaire Lumens: 18158.8 lumens
Efficiency: N/A
Efficacy: 137.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 132.4
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	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°	10115	10115	10115
5°	10154	10025	10099
10°	10113	9983	10057
15°	10035	9912	9997
20°	9944	9828	9905
25°	9835	9734	9805
30°	9711	9605	9657
35°	9583	9482	9527
40°	9421	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8794	8681	8602
60°	8510	8364	8290
65°	8051	7898	7789
70°	7561	7372	7186
75°	6803	6554	6413
80°	5441	5332	5281
85°	3260	3684	3784



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	1.1
10°-20°	589.2	3.2
20°-30°	885.2	4.9
30°-40°	1056.3	5.8
40°-50°	1083.3	6.0
50°-60°	965.2	5.3
60°-70°	719.7	4.0
70°-80°	390.3	2.1
80°-90°	93.6	0.5
90°-100°	877.2	4.8
100°-110°	2371.7	13.1
110°-120°	2493.5	13.7
120°-130°	2025.4	11.2
130°-140°	1588.7	8.7
140°-150°	1219.4	6.7
150°-160°	877.0	4.8
160°-170°	535.7	3.0
170°-180°	180.6	1.0
0°-30°	1681.4	9.3
0°-40°	2737.7	15.1
0°-60°	4786.1	26.4
0°-90°	5989.7	33.0
90°-120°	5742.4	31.6
90°-150°	10575.8	58.2
90°-180°	12169.0	67.0
0°-180°	18158.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2193	2193	2193	2193	2193	
5°	2193	2189	2165	2183	2181	208
15°	2101	2097	2075	2091	2093	593
25°	1932	1930	1912	1922	1926	890
35°	1702	1698	1684	1684	1692	1063
45°	1419	1414	1402	1402	1405	1092
55°	1093	1091	1079	1070	1070	977
65°	738	738	724	716	714	734
75°	382	374	368	362	360	401
85°	62	66	70	70	72	85
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	1887	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1889	1888	1881	1906	1902	179
180°	1887	1887	1887	1887	1887	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2192.7	2192.7	2192.7	2192.7	2192.7
2.5°	2200.7	2195.9	2176.7	2192.7	2191.1
5°	2192.7	2188.8	2164.8	2182.7	2180.8
7.5°	2174.8	2170.5	2146.9	2164.8	2164.4
10°	2158.9	2153.0	2131.1	2148.9	2146.9
12.5°	2138.2	2132.4	2110.4	2128.2	2126.3
15°	2101.3	2097.3	2075.4	2091.3	2093.3
17.5°	2059.0	2051.7	2032.1	2047.6	2049.6
20°	2025.7	2019.9	2001.9	2015.8	2017.7
22.5°	1990.8	1984.9	1966.8	1980.8	1982.8
25°	1932.3	1930.3	1912.4	1922.5	1926.3
27.5°	1869.0	1863.6	1849.1	1856.8	1860.7
30°	1823.0	1819.0	1803.1	1809.1	1813.0
32.5°	1775.2	1772.9	1758.5	1761.5	1766.9
35°	1701.6	1697.8	1683.7	1683.9	1691.7
37.5°	1620.2	1615.9	1604.2	1602.3	1605.5
40°	1564.5	1558.7	1548.6	1546.6	1546.6
42.5°	1507.3	1503.0	1489.8	1486.3	1491.0
45°	1419.4	1413.5	1401.5	1401.6	1405.4
47.5°	1324.3	1322.0	1308.0	1301.7	1303.3
50°	1254.4	1258.3	1244.4	1236.7	1244.4
52.5°	1194.0	1191.6	1179.2	1171.3	1174.5
55°	1093.4	1091.4	1079.4	1069.5	1069.5
57.5°	992.3	987.3	974.9	967.4	973.3
60°	922.4	920.5	906.5	892.7	898.5
62.5°	852.4	848.9	835.0	825.9	830.2
65°	737.6	737.6	723.6	715.6	713.6
67.5°	636.9	627.6	619.9	610.2	607.6
70°	560.6	552.8	546.6	538.6	532.8
72.5°	485.8	481.2	472.0	464.0	462.8
75°	381.7	373.9	367.7	361.7	359.8
77.5°	271.5	270.0	264.4	261.3	262.4
80°	204.8	204.8	200.7	200.7	198.8
82.5°	144.4	145.8	145.1	141.9	141.5
85°	61.6	65.5	69.6	69.6	71.5
87.5°	11.9	21.3	22.6	23.0	22.6
90°	4.0	12.0	26.5	28.4	26.5
92.5°	57.7	210.3	414.9	180.1	130.5
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1381.9
100°	280.4	576.3	2527.4	2635.9	2131.3
102.5°	337.3	615.8	2616.9	3207.6	2830.1
105°	440.9	681.3	2631.1	3881.0	3722.0
107.5°	536.8	756.1	2516.1	4301.1	4353.9
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°	678.1	864.1	2319.4	4391.3	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.2	2091.4	3968.5	4585.6
120°	930.5	1089.5	2037.8	3785.1	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.7	3898.8
127.5°	1133.2	1285.4	1944.0	3098.5	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.5
132.5°	1212.9	1368.2	1924.5	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.4
137.5°	1335.2	1477.9	1904.9	2549.9	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.3
145°	1481.1	1592.4	1887.4	2293.7	2468.5
147.5°	1538.5	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.0	2265.4
152.5°	1619.6	1696.0	1873.6	2113.8	2202.0
155°	1672.0	1737.6	1871.2	2057.6	2125.1
157.5°	1726.6	1772.2	1871.6	2018.5	2063.0
160°	1757.5	1795.2	1873.2	1993.9	2025.7
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.7
167.5°	1846.8	1859.2	1879.8	1934.3	1939.0
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.4	1887.5	1881.4	1905.6	1901.7
177.5°	1894.0	1889.1	1881.0	1897.1	1892.4
180°	1887.4	1887.4	1887.4	1887.4	1887.4

(END OF REPORT)