

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: P520390

Luminaire Tested: **SQ4-F-150U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520390  
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-830-1D-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**

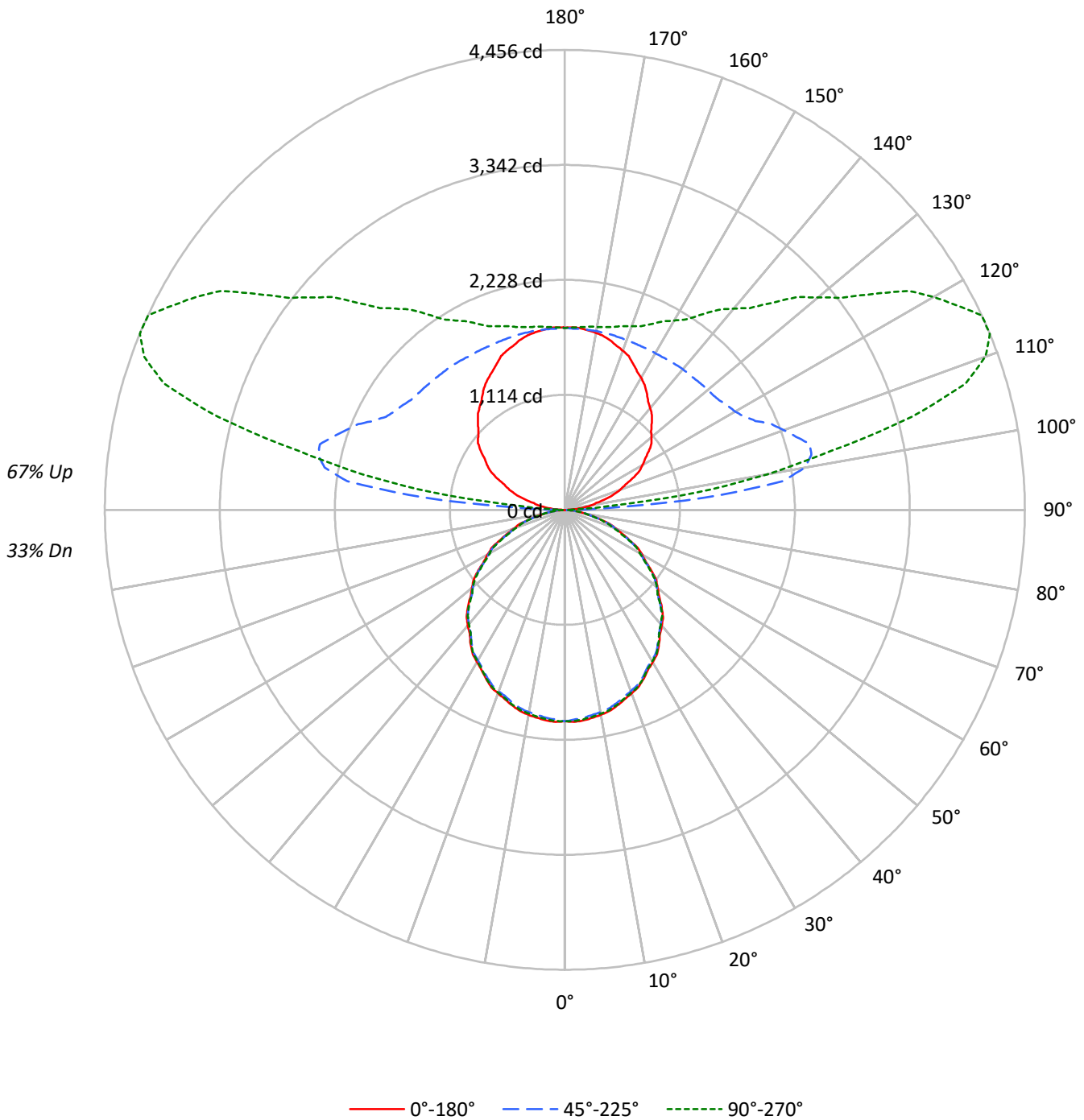
Lumens per Lamp: N/A  
Luminaire Lumens: 16969.3 lumens  
Efficiency: N/A  
Efficacy: 128.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	9452	9452	9452
5°	9488	9368	9437
10°	9450	9328	9398
15°	9378	9262	9342
20°	9293	9184	9257
25°	9191	9097	9162
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8704
45°	8653	8544	8569
50°	8413	8347	8347
55°	8218	8113	8038
60°	7952	7816	7747
65°	7523	7381	7280
70°	7066	6890	6714
75°	6358	6124	5994
80°	5082	4986	4936
85°	3049	3440	3541



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.4	1.1
10°-20°	550.6	3.2
20°-30°	827.2	4.9
30°-40°	987.1	5.8
40°-50°	1012.3	6.0
50°-60°	902.0	5.3
60°-70°	672.6	4.0
70°-80°	364.7	2.1
80°-90°	87.5	0.5
90°-100°	819.7	4.8
100°-110°	2216.3	13.1
110°-120°	2330.1	13.7
120°-130°	1892.7	11.2
130°-140°	1484.7	8.7
140°-150°	1139.5	6.7
150°-160°	819.5	4.8
160°-170°	500.6	3.0
170°-180°	168.8	1.0
0°-30°	1571.3	9.3
0°-40°	2558.3	15.1
0°-60°	4472.7	26.4
0°-90°	5597.4	33.0
90°-120°	5366.2	31.6
90°-150°	9883.0	58.2
90°-180°	11372.0	67.0
0°-180°	16969.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2049	2045	2023	2040	2038	194
15°	1964	1960	1939	1954	1956	554
25°	1806	1804	1787	1796	1800	832
35°	1590	1587	1574	1574	1581	993
45°	1326	1321	1310	1310	1313	1021
55°	1022	1020	1009	999	999	913
65°	689	689	676	669	667	686
75°	357	349	344	338	336	375
85°	58	61	65	65	67	80
90°	4	11	25	27	25	10
95°	127	447	1363	706	420	133
105°	412	637	2459	3627	3478	434
115°	725	887	2039	3947	4456	716
125°	993	1138	1838	3101	3644	885
135°	1190	1332	1788	2504	2835	920
145°	1384	1488	1764	2144	2307	866
155°	1563	1624	1749	1923	1986	721
165°	1701	1718	1756	1825	1834	479
175°	1766	1764	1758	1781	1777	168
180°	1764	1764	1764	1764	1764	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2049.0	2049.0	2049.0	2049.0	2049.0
2.5°	2056.5	2052.1	2034.2	2049.0	2047.5
5°	2049.0	2045.4	2023.0	2039.7	2037.9
7.5°	2032.3	2028.3	2006.3	2023.0	2022.6
10°	2017.4	2012.0	1991.4	2008.2	2006.3
12.5°	1998.1	1992.7	1972.2	1988.8	1987.0
15°	1963.6	1960.0	1939.4	1954.3	1956.1
17.5°	1924.2	1917.3	1898.9	1913.5	1915.3
20°	1893.0	1887.5	1870.7	1883.8	1885.6
22.5°	1860.3	1854.9	1838.0	1851.0	1852.9
25°	1805.7	1803.9	1787.2	1796.5	1800.1
27.5°	1746.6	1741.5	1728.0	1735.2	1738.8
30°	1703.5	1699.9	1684.9	1690.6	1694.3
32.5°	1658.9	1656.8	1643.3	1646.0	1651.2
35°	1590.1	1586.6	1573.5	1573.6	1580.9
37.5°	1514.0	1510.0	1499.1	1497.3	1500.3
40°	1462.0	1456.6	1447.2	1445.3	1445.3
42.5°	1408.5	1404.6	1392.2	1388.9	1393.2
45°	1326.4	1320.9	1309.7	1309.8	1313.4
47.5°	1237.6	1235.4	1222.4	1216.5	1217.9
50°	1172.2	1175.9	1163.0	1155.7	1163.0
52.5°	1115.7	1113.6	1102.0	1094.7	1097.5
55°	1021.8	1019.9	1008.8	999.4	999.4
57.5°	927.4	922.7	911.0	904.1	909.6
60°	861.9	860.2	847.1	834.2	839.7
62.5°	796.6	793.4	780.3	771.8	775.7
65°	689.2	689.2	676.2	668.8	666.9
67.5°	595.2	586.5	579.2	570.3	567.7
70°	523.9	516.6	510.8	503.3	497.8
72.5°	454.0	449.6	441.1	433.6	432.5
75°	356.7	349.4	343.6	338.0	336.3
77.5°	253.8	252.3	247.1	244.1	245.2
80°	191.3	191.3	187.7	187.6	185.8
82.5°	134.9	136.3	135.6	132.7	132.3
85°	57.6	61.2	65.0	65.0	66.9
87.5°	11.1	19.9	21.2	21.6	21.2
90°	3.8	11.3	24.6	26.6	24.6
92.5°	53.9	196.5	387.7	168.3	121.9
95°	127.2	446.6	1363.2	705.5	419.6
97.5°	204.3	512.0	2124.9	1758.5	1291.4
100°	262.0	538.6	2361.9	2463.2	1991.7
102.5°	315.2	575.4	2445.5	2997.4	2644.7
105°	412.0	636.6	2458.7	3626.8	3478.3
107.5°	501.6	706.6	2351.2	4019.3	4068.7
110°	571.5	757.1	2255.5	4124.7	4334.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	633.8	807.5	2167.5	4103.7	4456.0
115°	725.3	886.8	2039.1	3947.4	4456.0
117.5°	814.8	966.4	1954.4	3708.6	4285.2
120°	869.6	1018.1	1904.3	3537.1	4125.7
122.5°	921.2	1066.7	1874.0	3353.6	3946.5
125°	993.0	1137.8	1837.8	3101.4	3643.5
127.5°	1059.0	1201.2	1816.6	2895.6	3372.3
130°	1095.5	1242.2	1807.5	2768.5	3199.1
132.5°	1133.4	1278.6	1798.4	2653.8	3050.4
135°	1190.4	1331.5	1788.4	2504.2	2834.7
137.5°	1247.7	1381.0	1780.1	2382.8	2652.0
140°	1287.3	1411.6	1777.1	2304.6	2544.1
142.5°	1325.2	1442.2	1771.0	2234.1	2443.8
145°	1384.0	1488.1	1763.8	2143.5	2306.8
147.5°	1437.7	1529.7	1755.4	2061.4	2186.8
150°	1477.1	1558.8	1752.4	2016.7	2117.0
152.5°	1513.6	1584.8	1750.9	1975.3	2057.7
155°	1562.6	1623.9	1748.6	1922.8	1985.9
157.5°	1613.4	1656.2	1749.0	1886.2	1927.9
160°	1642.3	1677.6	1750.5	1863.2	1892.9
162.5°	1665.1	1694.4	1752.0	1844.8	1867.1
165°	1701.1	1717.8	1756.3	1824.8	1834.0
167.5°	1725.9	1737.3	1756.6	1807.6	1812.0
170°	1741.1	1746.6	1758.2	1799.9	1799.9
172.5°	1753.1	1754.3	1758.2	1790.8	1789.2
175°	1765.7	1763.9	1758.2	1780.8	1777.1
177.5°	1769.9	1765.4	1757.8	1772.8	1768.3
180°	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)