

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: P520302

Luminaire Tested: **SQ4-F-125U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520302  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-075D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

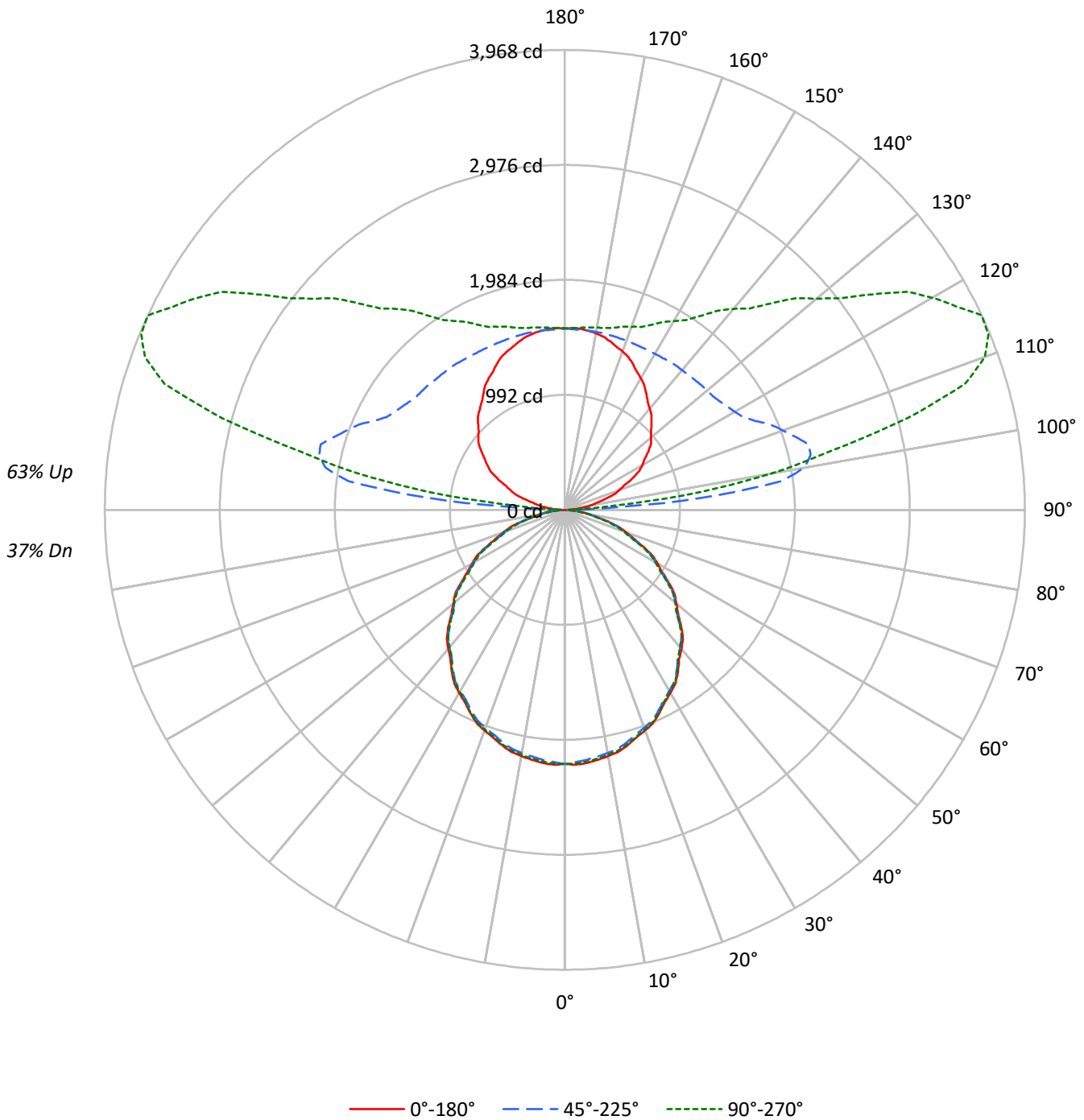
Lumens per Lamp: N/A  
Luminaire Lumens: 16088.7 lumens  
Efficiency: N/A  
Efficacy: 150.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 107.1  
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: P520302  
CATALOG NUMBER: SQ4-F-125U-075D-840-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P520302

CATALOG NUMBER: SQ4-F-125U-075D-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	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	95	91	87	83	86	82	79	76	67	64	62	52	51	50	39	38	37	31
2	86	79	73	68	78	72	67	62	58	55	52	46	43	41	34	33	31	26
3	79	69	62	56	71	63	57	52	51	47	43	41	37	35	30	28	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	54	47	41	59	50	43	38	41	35	32	32	29	26	24	22	20	16
6	61	49	41	35	55	45	38	32	37	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	28	33	28	24	26	23	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

**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



TEST NUMBER: P520302

CATALOG NUMBER: SQ4-F-125U-075D-840-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.0	1.3
10°-20°	589.2	3.7
20°-30°	885.2	5.5
30°-40°	1056.3	6.6
40°-50°	1083.3	6.7
50°-60°	965.2	6.0
60°-70°	719.7	4.5
70°-80°	390.3	2.4
80°-90°	93.3	0.6
90°-100°	731.8	4.5
100°-110°	1971.4	12.3
110°-120°	2068.9	12.9
120°-130°	1678.9	10.4
130°-140°	1316.7	8.2
140°-150°	1010.9	6.3
150°-160°	726.8	4.5
160°-170°	444.1	2.8
170°-180°	149.7	0.9
0°-30°	1681.4	10.5
0°-40°	2737.7	17.0
0°-60°	4786.1	29.7
0°-90°	5989.5	37.2
90°-120°	4772.2	29.7
90°-150°	8778.6	54.6
90°-180°	10099.0	62.8
0°-180°	16088.7	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	24	26	26	9
95°	112	398	1200	614	424	117
105°	365	567	2180	3262	3061	383
115°	644	788	1816	3508	3968	633
125°	879	1009	1630	2755	3242	785
135°	1058	1181	1584	2223	2517	817
145°	1224	1319	1564	1900	2041	767
155°	1389	1440	1550	1705	1760	639
165°	1507	1524	1556	1618	1626	425
175°	1566	1564	1558	1580	1576	149
180°	1564	1564	1564	1564	1564	



TEST NUMBER: P520302

CATALOG NUMBER: SQ4-F-125U-075D-840-1D-UNV-STD-W-8

**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	22.2	22.6	22.6
90°	3.9	11.7	23.9	26.0	26.0
92.5°	48.6	171.8	339.6	163.5	113.6
95°	111.6	398.0	1199.7	613.5	424.5
97.5°	178.2	455.7	1881.7	1571.9	1185.3
100°	229.2	478.6	2098.5	2195.6	1821.5
102.5°	278.6	510.9	2170.3	2662.7	2355.6
105°	364.7	567.4	2180.2	3261.8	3061.1
107.5°	446.0	626.9	2087.4	3569.6	3621.4
110°	500.3	671.7	2002.8	3665.3	3854.2



TEST NUMBER: P520302

CATALOG NUMBER: SQ4-F-125U-075D-840-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	557.6	716.7	1921.5	3644.1	3954.7
115°	643.7	787.9	1815.6	3508.0	3967.9
117.5°	722.2	857.5	1733.5	3290.7	3802.8
120°	773.3	903.8	1691.9	3134.8	3660.9
122.5°	817.9	946.9	1661.6	2975.3	3499.9
125°	878.9	1009.4	1630.2	2755.3	3242.4
127.5°	937.5	1066.0	1610.2	2561.2	2996.2
130°	972.5	1101.2	1602.3	2450.0	2831.9
132.5°	1007.6	1134.6	1594.3	2352.0	2702.7
135°	1058.3	1181.0	1584.4	2222.8	2517.0
137.5°	1106.5	1224.1	1579.1	2113.2	2354.8
140°	1140.0	1252.9	1574.4	2045.7	2263.9
142.5°	1175.0	1280.3	1571.2	1982.7	2166.6
145°	1223.6	1319.1	1564.4	1900.4	2040.7
147.5°	1276.2	1359.3	1557.6	1831.1	1941.5
150°	1311.3	1383.4	1554.5	1787.7	1879.3
152.5°	1343.2	1406.0	1552.9	1752.2	1826.7
155°	1389.0	1439.7	1550.4	1705.1	1759.7
157.5°	1429.3	1468.6	1550.8	1672.1	1708.7
160°	1454.8	1488.0	1552.5	1652.7	1680.0
162.5°	1477.1	1504.1	1554.1	1636.6	1656.1
165°	1506.6	1524.2	1556.4	1618.4	1626.2
167.5°	1530.5	1540.7	1558.4	1604.3	1607.5
170°	1546.5	1550.4	1558.4	1596.3	1596.3
172.5°	1556.1	1556.8	1560.0	1588.3	1588.3
175°	1566.4	1564.4	1558.4	1580.3	1576.4
177.5°	1570.8	1567.7	1559.6	1572.3	1569.2
180°	1564.4	1564.4	1564.4	1564.4	1564.4

(END OF REPORT)