

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: P520317

Luminaire Tested: **SQ4-F-125U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520317  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-100D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

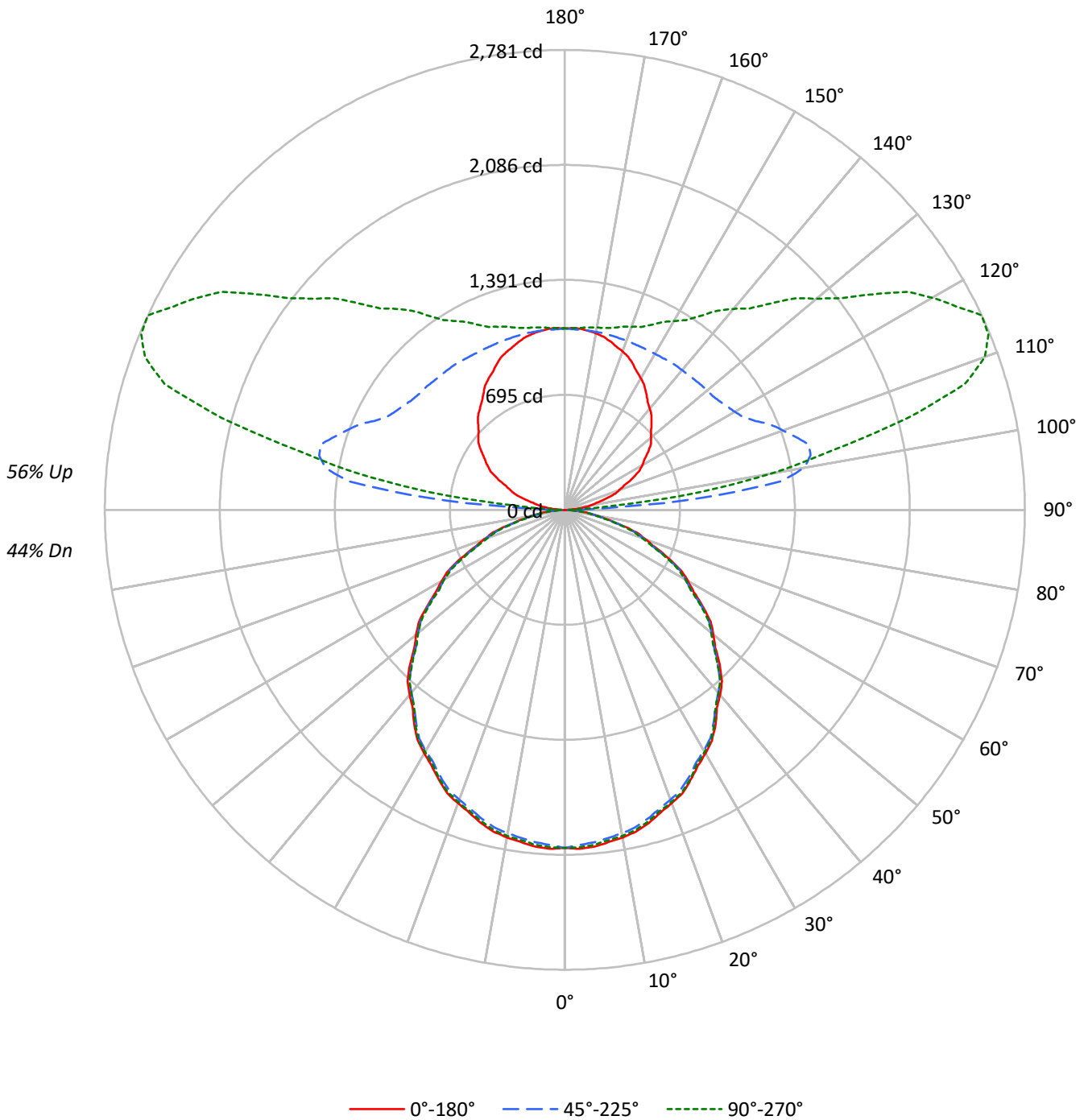
Lumens per Lamp: N/A  
Luminaire Lumens: 12655.6 lumens  
Efficiency: N/A  
Efficacy: 125.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 100.8  
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30	26
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12572	12572	12572
5°	12629	12455	12551
10°	12564	12406	12503
15°	12488	12318	12417
20°	12359	12213	12313
25°	12224	12082	12177
30°	12076	11946	12006
35°	11924	11777	11840
40°	11726	11590	11602
45°	11519	11360	11324
50°	11222	11088	11062
55°	10892	10771	10697
60°	10561	10371	10337
65°	10045	9821	9740
70°	9335	9107	8931
75°	8337	8068	7902
80°	6858	6610	6308
85°	4058	4453	4552



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.9	1.5
10°-20°	549.3	4.3
20°-30°	825.0	6.5
30°-40°	984.5	7.8
40°-50°	1009.2	8.0
50°-60°	898.7	7.1
60°-70°	669.9	5.3
70°-80°	362.7	2.9
80°-90°	85.1	0.7
90°-100°	512.9	4.1
100°-110°	1381.7	10.9
110°-120°	1450.0	11.5
120°-130°	1176.7	9.3
130°-140°	922.8	7.3
140°-150°	708.5	5.6
150°-160°	509.4	4.0
160°-170°	311.2	2.5
170°-180°	105.0	0.8
0°-30°	1567.2	12.4
0°-40°	2551.8	20.2
0°-60°	4459.6	35.2
0°-90°	5577.4	44.1
90°-120°	3344.7	26.4
90°-150°	6152.6	48.6
90°-180°	7078.0	55.9
0°-180°	12655.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2045	2041	2017	2035	2033	194
15°	1961	1954	1934	1950	1950	552
25°	1801	1797	1780	1790	1794	830
35°	1588	1581	1568	1571	1577	991
45°	1324	1317	1306	1299	1302	1019
55°	1016	1017	1004	995	998	909
65°	690	687	675	668	669	683
75°	351	347	340	332	332	374
85°	58	63	63	64	64	80
90°	3	8	17	18	18	7
95°	78	279	841	430	298	82
105°	256	398	1528	2286	2145	269
115°	451	552	1272	2459	2781	444
125°	616	708	1142	1931	2272	550
135°	742	828	1110	1558	1764	572
145°	858	925	1096	1332	1430	538
155°	974	1009	1087	1195	1233	448
165°	1056	1068	1091	1134	1140	298
175°	1098	1096	1092	1108	1105	104
180°	1096	1096	1096	1096	1096	

TEST NUMBER: P520317

CATALOG NUMBER: SQ4-F-125U-100D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2044.0	2044.0	2044.0	2044.0	2044.0
2.5°	2051.8	2047.4	2029.4	2043.9	2041.7
5°	2045.4	2041.2	2017.3	2035.4	2032.8
7.5°	2026.2	2022.2	2001.1	2017.8	2015.3
10°	2011.7	2007.6	1986.4	2003.2	2001.9
12.5°	1992.6	1988.5	1967.4	1984.1	1982.7
15°	1961.1	1954.3	1934.5	1949.9	1949.9
17.5°	1919.6	1914.5	1896.0	1909.0	1909.3
20°	1888.2	1884.1	1865.8	1879.9	1881.2
22.5°	1856.8	1852.7	1832.1	1845.1	1847.6
25°	1801.2	1797.2	1780.2	1790.1	1794.3
27.5°	1744.0	1738.0	1721.3	1730.1	1733.0
30°	1700.3	1697.5	1682.0	1686.3	1690.4
32.5°	1654.3	1651.5	1638.2	1640.4	1647.7
35°	1588.0	1581.2	1568.4	1571.3	1576.8
37.5°	1509.7	1506.4	1494.1	1492.5	1497.6
40°	1460.4	1454.9	1443.5	1440.9	1444.9
42.5°	1406.5	1401.0	1387.4	1384.8	1389.9
45°	1324.3	1317.4	1306.0	1299.1	1301.8
47.5°	1232.3	1232.3	1220.5	1212.5	1216.5
50°	1172.7	1172.7	1158.8	1151.8	1156.0
52.5°	1111.0	1112.2	1097.0	1093.4	1092.0
55°	1015.7	1017.1	1004.4	994.7	997.5
57.5°	923.6	920.6	905.9	899.6	901.0
60°	858.5	854.4	843.1	833.5	840.3
62.5°	792.4	790.4	779.2	768.2	767.4
65°	690.2	687.4	674.8	667.8	669.2
67.5°	588.6	585.4	573.8	563.8	567.3
70°	519.1	519.1	506.4	500.8	496.6
72.5°	455.1	449.6	440.2	432.3	429.2
75°	350.8	346.6	339.5	332.5	332.5
77.5°	255.3	251.8	247.2	242.4	241.0
80°	193.6	192.2	186.6	185.0	178.1
82.5°	136.3	136.0	132.7	129.1	128.8
85°	57.5	63.0	63.1	64.5	64.5
87.5°	10.7	18.3	19.1	17.1	17.1
90°	2.8	8.3	16.8	18.2	18.2
92.5°	34.0	120.4	238.0	114.6	79.6
95°	78.2	278.9	840.9	430.0	297.5
97.5°	124.9	319.3	1318.8	1101.8	830.8
100°	160.6	335.5	1470.8	1538.9	1276.6
102.5°	195.3	358.1	1521.0	1866.2	1651.0
105°	255.6	397.6	1528.0	2286.1	2145.4
107.5°	312.6	439.3	1463.0	2501.8	2538.2
110°	350.6	470.8	1403.7	2568.8	2701.3



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CATALOG NUMBER: SQ4-F-125U-100D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	390.8	502.2	1346.8	2554.0	2771.7
115°	451.1	552.2	1272.5	2458.6	2781.0
117.5°	506.2	601.0	1214.9	2306.4	2665.3
120°	541.9	633.5	1185.8	2197.1	2565.9
122.5°	573.2	663.7	1164.6	2085.3	2453.0
125°	616.0	707.5	1142.5	1931.1	2272.5
127.5°	657.1	747.1	1128.6	1795.0	2099.8
130°	681.6	771.7	1123.0	1717.1	1984.8
132.5°	706.2	795.2	1117.4	1648.4	1894.3
135°	741.7	827.8	1110.5	1557.8	1764.1
137.5°	775.5	857.9	1106.8	1481.1	1650.4
140°	798.9	878.2	1103.4	1433.8	1586.7
142.5°	823.5	897.3	1101.2	1389.6	1518.6
145°	857.7	924.6	1096.4	1332.0	1430.2
147.5°	894.5	952.7	1091.7	1283.4	1360.7
150°	919.0	969.5	1089.4	1252.9	1317.2
152.5°	941.4	985.4	1088.3	1228.1	1280.3
155°	973.5	1009.0	1086.7	1195.1	1233.3
157.5°	1001.7	1029.3	1087.0	1171.9	1197.6
160°	1019.7	1042.9	1088.1	1158.3	1177.4
162.5°	1035.3	1054.1	1089.2	1147.1	1160.7
165°	1056.0	1068.2	1090.9	1134.3	1139.8
167.5°	1072.7	1079.8	1092.3	1124.5	1126.6
170°	1083.9	1086.6	1092.3	1118.8	1118.8
172.5°	1090.6	1091.1	1093.4	1113.2	1113.2
175°	1097.8	1096.4	1092.3	1107.6	1104.8
177.5°	1100.9	1098.7	1093.1	1102.0	1099.8
180°	1096.4	1096.4	1096.4	1096.4	1096.4

(END OF REPORT)