

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: P520294

Luminaire Tested: **SQ4-F-125U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520294  
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-830-1D-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**

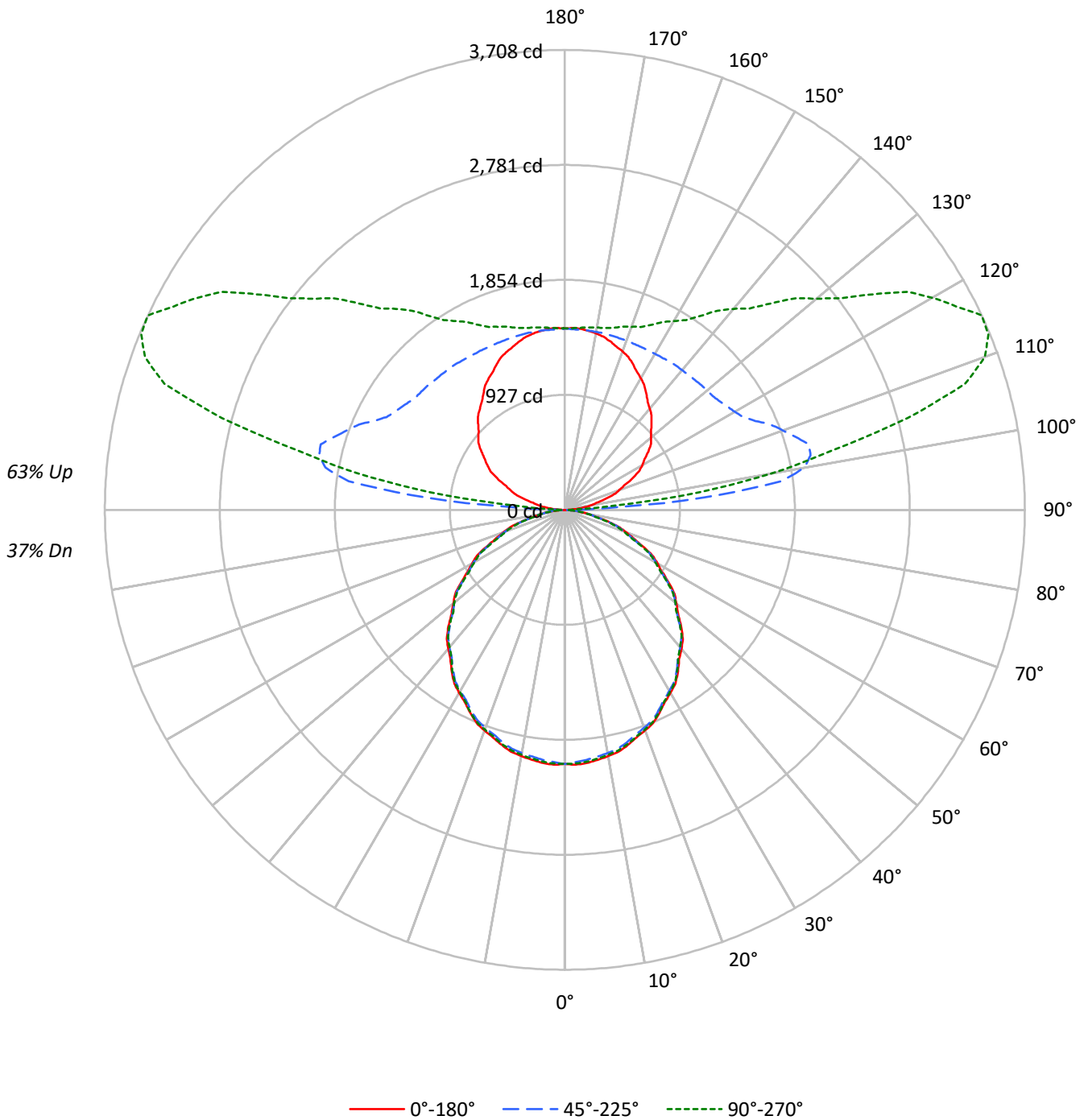
Lumens per Lamp: N/A  
Luminaire Lumens: 15034.8 lumens  
Efficiency: N/A  
Efficacy: 140.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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



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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	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°	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	1.3
10°-20°	550.6	3.7
20°-30°	827.2	5.5
30°-40°	987.1	6.6
40°-50°	1012.3	6.7
50°-60°	902.0	6.0
60°-70°	672.6	4.5
70°-80°	364.7	2.4
80°-90°	87.2	0.6
90°-100°	683.9	4.5
100°-110°	1842.3	12.3
110°-120°	1933.4	12.9
120°-130°	1568.9	10.4
130°-140°	1230.4	8.2
140°-150°	944.7	6.3
150°-160°	679.2	4.5
160°-170°	415.0	2.8
170°-180°	139.9	0.9
0°-30°	1571.3	10.5
0°-40°	2558.3	17.0
0°-60°	4472.7	29.7
0°-90°	5597.2	37.2
90°-120°	4459.5	29.7
90°-150°	8203.5	54.6
90°-180°	9438.0	62.8
0°-180°	15034.8	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	22	24	24	9
95°	104	372	1121	573	397	109
105°	341	530	2037	3048	2861	358
115°	602	736	1697	3278	3708	592
125°	821	943	1523	2575	3030	733
135°	989	1104	1481	2077	2352	763
145°	1144	1233	1462	1776	1907	717
155°	1298	1345	1449	1593	1644	598
165°	1408	1424	1454	1512	1520	397
175°	1464	1462	1456	1477	1473	139
180°	1462	1462	1462	1462	1462	

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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	20.8	21.2	21.2
90°	3.7	11.1	22.3	24.2	24.2
92.5°	45.5	160.5	317.3	152.7	106.2
95°	104.3	372.0	1121.1	573.3	396.7
97.5°	166.5	425.8	1758.4	1469.0	1107.7
100°	214.2	447.3	1961.0	2051.8	1702.2
102.5°	260.4	477.4	2028.1	2488.3	2201.3
105°	340.8	530.2	2037.4	3048.1	2860.6
107.5°	416.8	585.8	1950.6	3335.8	3384.2
110°	467.4	627.7	1871.6	3425.1	3601.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	521.1	669.7	1795.6	3405.4	3695.6
115°	601.5	736.3	1696.6	3278.2	3707.9
117.5°	674.9	801.3	1619.9	3075.2	3553.8
120°	722.6	844.6	1581.1	2929.5	3421.1
122.5°	764.3	884.9	1552.8	2780.5	3270.7
125°	821.2	943.3	1523.4	2574.7	3030.0
127.5°	876.0	996.2	1504.7	2393.4	2799.8
130°	908.9	1029.0	1497.3	2289.5	2646.4
132.5°	941.6	1060.3	1489.8	2197.9	2525.7
135°	988.9	1103.6	1480.6	2077.1	2352.1
137.5°	1034.0	1144.0	1475.7	1974.7	2200.6
140°	1065.3	1170.8	1471.3	1911.7	2115.6
142.5°	1098.0	1196.4	1468.2	1852.9	2024.7
145°	1143.5	1232.7	1461.9	1775.9	1907.0
147.5°	1192.6	1270.2	1455.6	1711.3	1814.3
150°	1225.4	1292.8	1452.6	1670.6	1756.2
152.5°	1255.2	1313.8	1451.2	1637.5	1707.0
155°	1298.0	1345.4	1448.9	1593.4	1644.5
157.5°	1335.6	1372.4	1449.3	1562.6	1596.8
160°	1359.5	1390.5	1450.8	1544.4	1570.0
162.5°	1380.3	1405.5	1452.2	1529.4	1547.6
165°	1407.9	1424.3	1454.5	1512.3	1519.6
167.5°	1430.2	1439.7	1456.4	1499.2	1502.2
170°	1445.1	1448.8	1456.4	1491.7	1491.7
172.5°	1454.1	1454.8	1457.9	1484.3	1484.3
175°	1463.8	1462.0	1456.4	1476.7	1473.1
177.5°	1467.9	1465.0	1457.5	1469.3	1466.4
180°	1461.9	1461.9	1461.9	1461.9	1461.9

(END OF REPORT)