

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: P520426

Luminaire Tested: **SQ4-F-150U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520426
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

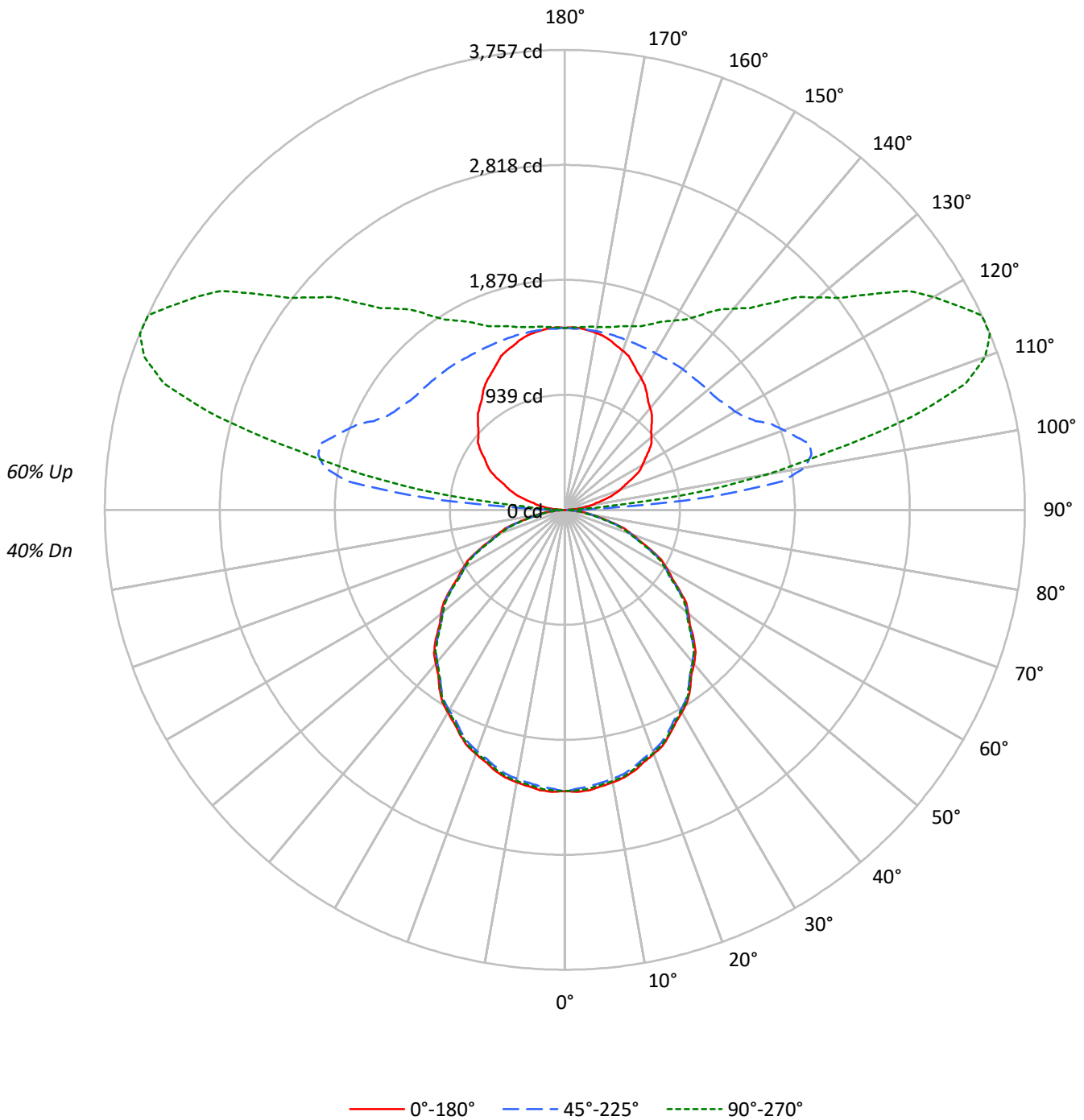
Lumens per Lamp: N/A
Luminaire Lumens: 15856.7 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.5
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10599	10599	10599
5°	10646	10501	10581
10°	10593	10459	10541
15°	10528	10386	10468
20°	10420	10296	10381
25°	10306	10186	10265
30°	10180	10071	10122
35°	10053	9928	9982
40°	9886	9772	9781
45°	9711	9578	9546
50°	9461	9348	9325
55°	9182	9080	9017
60°	8904	8744	8715
65°	8468	8279	8211
70°	7870	7677	7529
75°	7026	6802	6661
80°	5781	5574	5318
85°	3425	3753	3837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.8	1.4
10°-20°	617.5	3.9
20°-30°	927.3	5.8
30°-40°	1106.7	7.0
40°-50°	1134.4	7.2
50°-60°	1010.2	6.4
60°-70°	753.0	4.7
70°-80°	407.7	2.6
80°-90°	95.9	0.6
90°-100°	691.0	4.4
100°-110°	1868.5	11.8
110°-120°	1964.4	12.4
120°-130°	1595.7	10.1
130°-140°	1251.7	7.9
140°-150°	960.7	6.1
150°-160°	690.9	4.4
160°-170°	422.1	2.7
170°-180°	142.3	0.9
0°-30°	1761.7	11.1
0°-40°	2868.4	18.1
0°-60°	5012.9	31.6
0°-90°	6269.5	39.5
90°-120°	4524.0	28.5
90°-150°	8331.9	52.5
90°-180°	9587.0	60.5
0°-180°	15856.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2298	2298	2298	2298	2298	
5°	2299	2294	2268	2288	2285	218
15°	2204	2197	2175	2192	2192	621
25°	2025	2020	2001	2012	2017	933
35°	1785	1777	1763	1766	1772	1114
45°	1489	1481	1468	1460	1463	1145
55°	1142	1143	1129	1118	1121	1022
65°	776	773	758	751	752	767
75°	394	390	382	374	374	420
85°	65	71	71	72	72	90
90°	3	10	21	22	21	9
95°	107	376	1149	595	354	112
105°	347	537	2073	3058	2932	366
115°	611	748	1719	3328	3757	604
125°	837	959	1549	2615	3072	746
135°	1004	1123	1508	2111	2390	776
145°	1167	1254	1487	1807	1945	730
155°	1317	1369	1474	1621	1674	608
165°	1434	1448	1481	1538	1546	404
175°	1489	1487	1482	1501	1498	141
180°	1487	1487	1487	1487	1487	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2297.5	2297.5	2297.5	2297.5	2297.5
2.5°	2306.3	2301.5	2281.2	2297.5	2295.0
5°	2299.1	2294.5	2267.6	2288.0	2284.9
7.5°	2277.7	2273.0	2249.3	2268.2	2265.4
10°	2261.3	2256.7	2232.9	2251.7	2250.3
12.5°	2239.9	2235.2	2211.4	2230.3	2228.8
15°	2204.5	2196.9	2174.6	2191.9	2191.9
17.5°	2157.8	2152.0	2131.4	2145.8	2146.1
20°	2122.5	2117.9	2097.3	2113.1	2114.6
22.5°	2087.2	2082.6	2059.4	2074.0	2076.8
25°	2024.7	2020.1	2001.1	2012.3	2016.8
27.5°	1960.4	1953.6	1934.9	1944.7	1948.2
30°	1911.2	1908.1	1890.7	1895.5	1900.2
32.5°	1859.5	1856.4	1841.5	1843.9	1852.2
35°	1785.1	1777.3	1763.0	1766.2	1772.5
37.5°	1697.1	1693.3	1679.4	1677.7	1683.5
40°	1641.6	1635.4	1622.7	1619.6	1624.3
42.5°	1581.0	1574.8	1559.6	1556.6	1562.4
45°	1488.6	1480.9	1468.1	1460.3	1463.3
47.5°	1385.2	1385.2	1371.9	1362.9	1367.5
50°	1318.3	1318.3	1302.5	1294.7	1299.4
52.5°	1248.9	1250.1	1233.2	1229.0	1227.4
55°	1141.7	1143.2	1129.0	1118.1	1121.2
57.5°	1038.3	1034.8	1018.4	1011.1	1012.7
60°	965.1	960.4	947.7	936.8	944.6
62.5°	890.7	888.5	875.8	863.5	862.6
65°	775.8	772.7	758.5	750.6	752.2
67.5°	661.7	658.0	644.9	633.7	637.7
70°	583.5	583.5	569.2	562.9	558.2
72.5°	511.6	505.4	494.8	485.9	482.5
75°	394.2	389.6	381.6	373.7	373.7
77.5°	287.0	283.0	277.8	272.5	270.9
80°	217.6	216.1	209.8	208.0	200.2
82.5°	153.3	153.0	149.2	145.1	144.8
85°	64.7	70.8	70.9	72.5	72.5
87.5°	12.0	20.6	21.8	19.5	19.2
90°	3.2	9.5	20.8	22.3	20.8
92.5°	45.5	165.7	326.8	141.8	102.7
95°	107.2	376.4	1149.2	594.7	353.7
97.5°	172.2	431.7	1791.5	1482.5	1088.8
100°	220.9	454.1	1991.1	2076.6	1679.1
102.5°	265.7	485.1	2061.7	2527.0	2229.7
105°	347.4	536.7	2072.8	3057.6	2932.3
107.5°	422.9	595.6	1982.2	3388.6	3430.2
110°	481.8	638.3	1901.5	3477.4	3654.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	534.3	680.8	1827.3	3459.7	3756.7
115°	611.4	747.6	1719.1	3327.9	3756.7
117.5°	687.0	814.7	1647.7	3126.5	3612.6
120°	733.1	858.3	1605.5	2982.0	3478.2
122.5°	776.6	899.4	1579.8	2827.2	3327.1
125°	837.2	959.2	1549.4	2614.7	3071.6
127.5°	892.8	1012.7	1531.5	2441.1	2843.0
130°	923.6	1047.2	1523.8	2334.0	2697.0
132.5°	955.6	1078.0	1516.1	2237.3	2571.6
135°	1003.6	1122.6	1507.8	2111.2	2389.7
137.5°	1052.0	1164.3	1500.7	2008.9	2235.8
140°	1085.3	1190.1	1498.2	1943.0	2144.9
142.5°	1117.2	1215.8	1493.1	1883.5	2060.4
145°	1166.8	1254.5	1486.9	1807.1	1944.8
147.5°	1212.0	1289.7	1479.9	1737.8	1843.6
150°	1245.3	1314.1	1477.4	1700.2	1784.7
152.5°	1276.0	1336.2	1476.1	1665.3	1734.7
155°	1317.3	1368.9	1474.2	1621.0	1674.3
157.5°	1360.2	1396.2	1474.5	1590.3	1625.3
160°	1384.5	1414.3	1475.8	1570.7	1595.8
162.5°	1403.8	1428.5	1477.1	1555.3	1574.1
165°	1434.1	1448.2	1480.6	1538.4	1546.2
167.5°	1455.0	1464.7	1480.9	1523.9	1527.7
170°	1467.7	1472.5	1482.2	1517.4	1517.4
172.5°	1478.0	1479.0	1482.2	1509.7	1508.5
175°	1488.6	1487.0	1482.2	1501.3	1498.2
177.5°	1492.1	1488.4	1481.9	1494.6	1490.9
180°	1486.9	1486.9	1486.9	1486.9	1486.9

(END OF REPORT)